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Baiga children deaths: panel questions delay in response

GS I: Society
Sobhana K. Nair
NEW DELHI

Members of the Parliamentary Standing Committee on Social Justice and Empowerment questioned the government over its response to the deaths of Baiga tribe children in Madhya Pradesh's Balaghat district, asking why there were no clear answers on the cause of the deaths several months after the first cases were reported.

The panel met representatives of the Ministry of Tribal Affairs, the Ministry of Jal Shakti, and the Department of Telecommunications to review the implementation of the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan.

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- Members of the **Parliamentary Standing Committee on Social Justice and Empowerment** questioned the government over its response to the deaths of **Baiga tribe** children in Madhya Pradesh's Balaghat district, asking why there were no clear answers on the cause of the deaths several months after the first cases were reported.

सामाजिक न्याय और अधिकारिता संबंधी संसदीय स्थायी समिति के सदस्यों ने मध्य प्रदेश के बालाघाट जिले में **बैगा जनजाति के बच्चों की मौतों** पर सरकार की प्रतिक्रिया को लेकर सवाल उठाए और पूछा कि पहले मामलों की सूचना दिए जाने के कई महीनों बाद भी मौतों के कारण के संबंध में स्पष्ट उत्तर क्यों नहीं मिले हैं।

- The panel met representatives of **the Ministry of Tribal Affairs, the Ministry of Jal Shakti, and the Department of Telecommunications** to review the implementation of the **Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan**.

समिति ने **जनजातीय कार्य मंत्रालय, जल शक्ति मंत्रालय और दूरसंचार विभाग** के प्रतिनिधियों से मुलाकात कर **प्रधानमंत्री जनजाति आदिवासी न्याय महाअभियान (PM-JANMAN)** के कार्यान्वयन की समीक्षा की।

1. Baiga Tribe and Balaghat District: Tribal and Mineral Importance

The **Baiga** are one of India's **Particularly Vulnerable Tribal Groups (PVTGs)** and are concentrated primarily in **Madhya Pradesh and Chhattisgarh**, with communities also found in adjoining areas. In Madhya Pradesh, the **Baiga Chak** region of Dindori is especially associated with them, while Baiga populations are also found in districts including **Balaghat and Mandla**.

Traditionally, the Baiga have had a close relationship with **forests**. Their livelihoods historically included collection of minor forest produce, hunting and gathering, and forms of **shifting cultivation traditionally known as bewar**. Their traditional knowledge encompasses forests, medicinal plants and local ecosystems. Their relative geographical isolation and socio-economic vulnerabilities are among the reasons for their classification as a **PVTG**.

Why is Balaghat important?

Balaghat district, in southeastern Madhya Pradesh, borders **Maharashtra and Chhattisgarh** and combines significant **tribal population, forests, biodiversity and mineral resources**. **Part of the Kanha Tiger Reserve landscape** also lies within the district.

Its mineral importance is exceptional:



- Balaghat's official district administration states that the district accounts for approximately **80% of India's manganese production**.
- Malanjkhand** contains what the district administration describes as the country's **largest copper deposit**.
- Other minerals include **bauxite, kyanite, marble, dolomite and limestone**.

The **Malanjkhand Copper Project**, established in **1982**, is operated by **Hindustan Copper Limited**; systematic exploration of the deposit by the Geological Survey of India began in **1969**.

2. Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)

PM-JANMAN stands for **Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan**. It is a major Government of India mission specifically targeted at **Particularly Vulnerable Tribal Groups (PVTGs)**—not all Scheduled Tribes.

It was launched on **15 November 2023**, celebrated as **Janjatiya Gaurav Divas**, for the socio-economic development of India's **75 PVTG communities**, residing across **18 States and the Union Territory of Andaman and Nicobar Islands**.

Why was PM-JANMAN needed?

Imagine an isolated tribal habitation where families lack:

pucca houses → piped drinking water → nearby healthcare → school facilities → electricity → all-weather roads → mobile connectivity.

Having separate government schemes for each problem may still leave the village uncovered because different ministries work independently.

PM-JANMAN therefore follows a **convergence and saturation approach**:

Identify PVTG habitations → identify infrastructure gaps → bring multiple ministries together → attempt to provide all essential services.

Important Facts

The mission has a total outlay of **₹24,104 crore**:

Central share	–	₹15,336	crore
State share	–	₹8,768	crore

It operates through **11 critical interventions involving 9 ministries**.

These interventions include:

Pucca housing • roads • piped drinking water • mobile medical units • Anganwadi centres • hostels • household electrification • mobile towers • multipurpose centres • Van Dhan Vikas Kendras • vocational skilling.

The original mission included a target of approximately 4.90 lakh pucca houses and 8,000 km of connecting roads.

The 11 interventions

Ministry	Critical intervention	Original Mission Target
1. Ministry of Rural Development	Pucca houses	4.90 lakh houses
	Connecting roads	8,000 km
2. Ministry of Jal Shakti	Piped/community water supply	PVTG habitations/households
3. Ministry of Health & Family Welfare	Mobile Medical Units (MMUs) with medicines	1,000 MMUs originally envisaged
4. Ministry of Women & Child Development	Anganwadi Centres	2,500 AWCs
5. Ministry of Education	Hostels	500 hostels
6. Ministry of Power	Last-mile household electrification	Unelectrified PVTG households
7. Ministry of New & Renewable Energy	Off-grid solar electrification	Remote households/habitations
8. Ministry of Communications	Mobile connectivity/towers	Uncovered PVTG habitations
9. Ministry of Tribal Affairs / livelihood convergence	Multipurpose Centres (MPCs)	1,000 MPCs
	Van Dhan Vikas Kendras (VDVKs) / livelihood support	Forest-based livelihood development
	Vocational education, skilling & entrepreneurship	PVTG youth/VDVK members

GS Paper II: Polity	08 September 2026
TOPICS COVERED	
08S9	Manipur to update NRC with 1951 as base year, House told सदन को बताया गया, मणिपुर में 1951 को आधार वर्ष मानकर NRC को अद्यतन किया जाएगा

Manipur to update NRC with 1951 as base year, House told

Kuki-Zo Council urges the Centre to conduct the Census in the State; Home Minister informs the State Assembly that 14,992 out of 24,475 'illegal immigrants' have been pushed back into Myanmar

GS II: Polity
The Hindu Bureau
GUWAHATI

Manipur Home Minister Konthoujam Govindas on Monday informed the 60-member Assembly that the **National Register of Citizens (NRC)** in the State would be updated using 1951 as the base year.

Manipur is divided on the NRC issue, for which the Centre recently deferred the Census exercise in the State. While Meitei and Naga organisations want the NRC before the Census and delimitation, Kuki organisations have called it "premature and unjustified".

Mr. Govindas said that the State government would pursue the implementation of the NRC with the Centre in line with the resolutions adopted by the House. He cited certain figures to justify the resolutions (2022, 2024, and on September 2).

He told the House that 14,992 out of 24,475 "illegal immigrants" detected in the State so far have been pushed back into Myanmar. The immigrants entered the country through



Women hold placards during a sit-in protest demanding the conduct and update of NRC before the Census in Imphal. ANI

three border districts – Chandel, Kamjong, and Tengnoupal. Manipur has been grappling with the influx of undocumented Myanmar nationals since the military coup in the neighbouring country in February 2021. Insisting that the pushback process was being carried out through diplomatic channels, Mr. Govindas said the government instructed the Deputy Commissioners concerned to segregate the "illegal immigrants" from

local Indian communities.

The Home Minister further informed the House that the government constituted a 12-member panel on August 7, 2024, under the chairmanship of former Minister Awang-bow Newmai to detect and identify the influx of illegal immigrants and the unnatural growth of new villages. A Cabinet Sub-Committee was also constituted on February 16, 2023, in this regard.

The Kuki-Zo Council

(KZC), the apex community body, on Monday urged the Centre to conduct the Census operation in the State, insisting that "politically motivated demands" should not obstruct it.

In a memorandum to Union Home Minister Amit Shah, the KZC said any decision concerning the NRC remained within the Centre's constitutional and legal authority.

The organisation also appealed to the Centre to re-impose President's Rule in Manipur if the State government continued to fail in its constitutional duty to protect all citizens, and expedite the political dialogue towards a "separate administration" in the form of a Union Territory with a legislature for the Kuki-Zo community.

"The Kuki-Zo people seek neither privilege nor preferential treatment. We seek equal protection, justice, security, and a political future in which our people can live with dignity and without fear," the KZC said.

All Naga MLAs abstained from the final sitting of the Manipur Assembly session on Monday.

08S9. Manipur to update NRC with 1951 as base year, House told

सदन को बताया गया, मणिपुर में 1951 को आधार वर्ष मानकर NRC को अद्यतन किया जाएगा

NRC, NPR and Census

These three are often confused because all involve collecting information about people. But their **purpose, legal basis and coverage are different.**



The simplest distinction is:

Census asks: “What is India's population like?”

NPR asks: “Who usually lives in India?”

NRC/NRIC asks: “Who among the relevant population are Indian citizens?”

1. Census — Counting and Understanding the Population

A **Census** is the country's large-scale population-counting exercise. It collects demographic and socio-economic information so governments can understand **how many people live in India and their characteristics**.

Suppose a village has 1,000 people. Census data can help answer questions such as:

How many are men/women? How many children? What are their ages? What languages do they speak? What are their educational and occupational characteristics? What housing facilities exist?

The objective is primarily **statistics and planning**, not determination of citizenship.

Law governing Census

The Census is conducted under:

Census Act, 1948

+

Census Rules, 1990

The **Registrar General & Census Commissioner of India (RGI)** is responsible for conducting it.

Census 2027

India's forthcoming Census has been officially notified for **2027**. The normal reference date is **1 March 2027**; for Ladakh and specified snow-bound areas of Jammu & Kashmir, Himachal Pradesh and Uttarakhand, it is **1 October 2026**.

So:

Census = statistical picture of the population

It is **not itself a citizenship register**.

2. NPR — National Population Register

This is where the distinction becomes particularly important.



The **National Population Register (NPR)** is a register containing details of **usual residents of India**.

Who is a “usual resident”?

For NPR purposes, the concept focuses on **residence rather than citizenship**.

Therefore, conceptually:

Indian citizen living here → included

Foreign national who qualifies as a usual resident → also included

This is why:

NPR ≠ Register of Indian Citizens.

Official Census material expressly states that NPR covers usual residents **regardless of whether they are citizens or non-citizens**.

Simple example

Imagine an apartment building in Delhi containing:

80 Indian citizens + 5 foreign nationals who qualify as usual residents.

For an NPR exercise, all **85 usual residents** can fall within the population register.

Therefore, NPR is essentially asking:

“Who ordinarily lives here?”

rather than:

“Are you an Indian citizen?”

When did NPR begin?

The **NPR** was first prepared in **2010** and subsequently **updated in 2015**.

What law governs NPR?

This is a very important UPSC distinction.

NPR is **not created under the Census Act, 1948** merely because its data collection can be conducted alongside Census operations.

Its legal foundation is:



Citizenship Act, 1955



Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003



particularly **Rule 3(4)** concerning preparation of the Population Register.

The government currently states that NPR is to be updated along with the **Houselisting and Housing Operations of the forthcoming Census**, and that **no document will be collected during this exercise**.

This produces an important distinction:

Census and NPR may be operationally connected, but they have different legal foundations and purposes.

3. NRC/NRIC — National Register of Indian Citizens

Now change one word:

NPR = Population

NRC/NRIC = Citizens

That word makes a major legal difference.

The Citizenship Act formally refers to the **National Register of Indian Citizens (NRIC)**.
“NRC” is the more commonly used expression.

Who belongs in it?

The concept is a register of **Indian citizens**, rather than all usual residents.

Return to our hypothetical building:

80 Indian citizens + 5 qualifying foreign usual residents

NPR could include:

80 Indians + 5 foreigners = 85 usual residents

But a register specifically of Indian citizens would concern:

80 Indian citizens

This is the clearest way to understand the distinction.



Legal basis of NRC/NRIC

The key provision is **Section 14A of the Citizenship Act, 1955**, inserted through the **Citizenship (Amendment) Act, 2003**.

Section 14A provides that the Central Government may **compulsorily register every citizen of India** and may maintain a **National Register of Indian Citizens**. It also provides for a National Registration Authority, with the Registrar General, India acting as the Registrar General of Citizen Registration.

The detailed framework comes from the:

Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003.

4. How are NPR and NRC legally connected?

This is the part that creates much of the confusion.

Under the **2003 Citizenship Rules**, there are:

Population Register

and

Local Register of Indian Citizens

They are therefore not completely unrelated databases created under entirely separate legal universes. Both arise within the **citizenship-registration framework** established by the Citizenship Act and the 2003 Rules.

But this does **not** mean:

NPR = NRC. ❌

The fundamental distinction remains:

Population Register → usual residents

Register of Indian Citizens → Indian citizens

That difference is crucial.

5. Where does the Assam NRC fit in?

Another common source of confusion is the **NRC exercise conducted in Assam**.

The Assam NRC has a **specific historical and legal context** connected with migration into Assam, the **Assam Accord**, citizenship law and judicial proceedings.

Therefore:

Assam NRC $\neq$ automatically the same thing as a nationwide NRC exercise.

When newspapers say “NRC”, always check whether they mean:

Assam NRC

or

a proposed/national NRIC exercise under Section 14A and the 2003 Rules.

6. Census vs NPR vs NRC — Best Comparison

Feature	Census	NPR	NRC/NRIC
Full name	Census of India	National Population Register	National Register of Indian Citizens
Basic question	How many/what kind of people live here?	Who usually lives here?	Who is an Indian citizen?
Main character	Statistical exercise	Resident database/register	Citizenship register
Covers Indian citizens?	Yes	Yes	Yes
Can cover qualifying foreign residents?	Population enumeration can count foreigners	Yes	No, because it is a citizen register
Determines citizenship?	No	Not by itself	Citizenship is the defining criterion
Principal law	Census Act, 1948	Citizenship Act, 1955 + 2003 Rules	Citizenship Act, 1955, Section 14A + 2003 Rules
Key concept	Population	Usual residence	Citizenship
First NPR	—	2010	Different context, including Assam-specific NRC
Authority	Registrar General & Census Commissioner	Registrar General framework	Registrar General of Citizen Registration



GS Paper II: Governance	08 September 2026
TOPICS COVERED	
08S9	Civil Service candidates await Centre's word on foundation course amid case in top court शीर्ष न्यायालय में मामले के बीच सिविल सेवा अभ्यर्थी फाउंडेशन कोर्स पर केंद्र के निर्णय की प्रतीक्षा में

Civil Service candidates await Centre's word on foundation course amid case in top court

GS II: Governance
Abhinay Lakshman
NEW DELHI

The 958 candidates recommended by the Union Public Service Commission in the 2025 Civil Services Examination (CSE) are now in limbo over their service allocation and the starting date of their foundation course.

While the course was expected to begin in August, several candidates told *The Hindu* they have received no communication regarding the way forward.

The delay follows the Centre's application to the Supreme Court asking permission for the Department of Personnel and Training (DoPT) to allocate services without implementing the court's March 11 *Rohith Nathan* judgment. That ruling found the DoPT was incorrectly excluding certain Other Backward Classes (OBC)

The delay follows the Centre's application to the Supreme Court regarding the Rohith Nathan judgment

candidates from reservation by concluding they belonged to the creamy layer based only on their parents' salary income. The court directed corrective measures within six months. The CSE 2025 results were declared on March 6, days before the judgment.

Now, while the Supreme Court is set to hear the Centre on September 17, candidates recommended for the Civil Services told *The Hindu* they have "no idea" what their future pathway looks like. "The foundation course has not started. I have received no communication from the DoPT or the academy

about when the foundation course will start. There was a schedule that said it was to start on August 24 tentatively, but since the Supreme Court became seized of the matter, we have not heard anything," one candidate said.

Another candidate said that they have not been able to see any updates regarding the next steps on the website of the DoPT or the website of the Lal Bahadur Shastri National Academy of Administration, where they will be trained.

A third candidate said that they are now waiting to see how the next hearing in the Supreme Court goes. "I believe the government is also waiting for the Supreme Court," the candidate said, adding that since the court is going to look at the issue of service allocation, no news of the foundation course can be expected until then.

08S9. Civil Service candidates await Centre's word on foundation course amid case in top court

शीर्ष न्यायालय में मामले के बीच सिविल सेवा अभ्यर्थी फाउंडेशन कोर्स पर केंद्र के निर्णय की प्रतीक्षा में

- The 958 candidates recommended by the Union Public Service Commission in the 2025 Civil Services Examination (CSE) are now in limbo over their service allocation and the starting date of their foundation course.

संघ लोक सेवा आयोग (UPSC) द्वारा 2025 की सिविल सेवा परीक्षा (CSE) में अनुशंसित 958 अभ्यर्थी अब अपने सेवा आवंटन और फाउंडेशन कोर्स की शुरुआत की तिथि को लेकर असमंजस की स्थिति में हैं।

- The delay follows the Centre's application to the Supreme Court asking permission for the Department of Personnel and Training (DoPT) to allocate services without implementing the court's March 11 *Rohith Nathan* judgment.

यह देरी केंद्र द्वारा सर्वोच्च न्यायालय में दायर उस आवेदन के बाद हुई है, जिसमें कार्मिक एवं प्रशिक्षण विभाग (DoPT) को न्यायालय के 11 मार्च के रोहित नाथन फैसले को लागू किए बिना सेवा आवंटित करने की अनुमति मांगी गई है।

- That ruling found the DoPT was incorrectly excluding certain Other Backward Classes (OBC) candidates from reservation by concluding they belonged to the creamy layer based only on their parents' salary income.

उस फैसले में न्यायालय ने पाया कि DoPT कुछ अन्य पिछड़ा वर्ग (OBC) अभ्यर्थियों को केवल उनके माता-पिता की वेतन आय के आधार पर उन्हें क्रीमी लेयर से संबंधित मानकर आरक्षण से गलत तरीके से बाहर कर रहा था।

- The court directed corrective measures within six months. न्यायालय ने छह महीने के भीतर सुधारात्मक उपाय करने का निर्देश दिया था।
- The CSE 2025 results were declared on March 6, days before the judgment. CSE 2025 के परिणाम 6 मार्च को घोषित किए गए थे, जो इस फैसले से कुछ दिन पहले था।



- Another candidate said that they have not been able to see any updates regarding the next steps on the website of the DoPT or the website of the **Lal Bahadur Shastri National Academy of Administration**, where they will be trained.

एक अन्य अभ्यर्थी ने कहा कि वे DoPT की वेबसाइट या लाल बहादुर शास्त्री राष्ट्रीय प्रशासन अकादमी (LBSNAA) की वेबसाइट पर अगले कदमों से संबंधित कोई अपडेट नहीं देख पाए हैं, जहाँ उन्हें प्रशिक्षण दिया जाएगा।

GS Paper II: International Relations		08 September 2026
TOPICS COVERED		
08S9	Arunachal and Aksai Chin between 'unspecified' claim lines on UN-endorsed map संयुक्त राष्ट्र द्वारा समर्थित मानचित्र में 'अस्पष्ट' दावा-रेखाओं के बीच अरुणाचल और अक्साई चिन	
08S9	Natural partners स्वाभाविक साझेदार	
08S9	India's opportunity to put BRICS back together BRICS को फिर से एकजुट करने का भारत के पास अवसर	
08S9	Why is BRICS exploring cross-border payments? BRICS सीमा-पार भुगतान की संभावनाओं की तलाश क्यों कर रहा है?	



Arunachal and Aksai Chin between 'unspecified' claim lines on UN-endorsed map

CS II: IR
Kallol Bhattacharjee
NEW DELHI

A new world map that was endorsed at the UN during the India-backed "Correct the map" resolution of September 4 in the UN General Assembly has projected India's Arunachal Pradesh and Aksai Chin, which India has maintained is a part of Ladakh, as distinct regions caught between Indian and Chinese "claim lines".

The map which came up on July 1 during the months-long discussion for the UNGA resolution shows Arunachal's southern State border with Assam, indicating the "Chinese line" while eliminating the State's border with Nagaland.

It shows the State's northern border, indicating the "Indian line". Similarly, the map shows Aksai Chin's eastern borders, indicating the "Indian Line" while presenting the western borders of Aksai Chin in what appears to be the "Chinese line". These "claim lines" appear to be a continuation of previous similar maps of the UN. But unlike in the 2011 map of the UN, these lines are not specified as "claim lines" in the July 1 map.

The map depicts Jammu and Kashmir with a dotted line indicating the Line of Control (LoC) between India and Pakistan. However, the issue of the LoC is clearly mentioned in a brief note on the map, explaining the "dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of J&K



Fine lines: A section of the world map published by the United Nations in July 2026. UNORG

has not yet been agreed upon by the parties."

But, there is no note on why the "Map of the World" issued by the UN during the consultation process and endorsed by the "Correct the Map" resolution sponsored by Togo and supported by the African Union depicted Arunachal and Aksai Chin as territories caught between Indian and Chinese claim lines. The map is non-binding, but it will be used by multilateral institutions worldwide.

'Cognitive justice'

Discussions on the map began in March 2026 when the African Union supported the "Equal Earth cartographic projection to more accurately represent Africa". The African Union called this approach "cognitive justice". Subsequently, Togo prompted UNGA consultations on the map in April 2026, and the UNGA started informal consultations in July, when the draft map authored by the UN Geospatial on July 1 was taken up.

The External Affairs Ministry had reiterated India's support for the "Correct the Map" resolution on Sunday but declared that "India voted in favour

of the resolution" and explained its position as a vote on the "underlying principle of promoting equal-area cartographic representation". "We also highlighted that the resolution does not constitute endorsement of any specific map, projection or depiction of national boundaries," the Ministry had said.

"India's sovereign territory, including Jammu and Kashmir and Ladakh, must be depicted in accordance with India's official map. Any inaccurate or misleading depiction is unacceptable," said the official spokesperson Randhir Jaiswal.

MEA is yet to respond to *The Hindu's* query on the separate demarcation of Arunachal and Aksai Chin with contesting claim lines from India and China.

The traditional map of India depicts both Arunachal and the entire Jammu and Kashmir and Ladakh (including Aksai Chin) as parts of the sovereign territory of India.

In relation to India's ongoing Kalapani border controversy with Nepal, the map seems to have gone in favour of India, as it reflects India's control over the Kalapani-Lipulekh-Limpiyadhura region, which is claimed by Nepal.

08S9. Arunachal and Aksai Chin between 'unspecified' claim lines on UN-endorsed map

संयुक्त राष्ट्र द्वारा समर्थित मानचित्र में

'अस्पष्ट' दावा-रेखाओं के बीच अरुणाचल और अक्साई चिन

- A new world map that was endorsed at the UN during the India-backed "Correct the Map" resolution of September 4 in the UN General Assembly has projected India's Arunachal Pradesh and Aksai Chin, which India has maintained is a part of Ladakh, as distinct regions caught between Indian and Chinese "claim lines".

4 सितंबर को संयुक्त राष्ट्र महासभा में भारत समर्थित

"Correct the Map" प्रस्ताव के दौरान संयुक्त राष्ट्र में

अनुमोदित एक नए विश्व मानचित्र में भारत के अरुणाचल प्रदेश और अक्साई चिन, जिसे भारत लद्दाख का हिस्सा मानता रहा है, को भारतीय और चीनी "दावा-रेखाओं" के बीच स्थित अलग-अलग क्षेत्रों के रूप में दर्शाया गया है।

- The map which came up on July 1 during the months-long discussion for the UNGA resolution shows Arunachal's southern State border with Assam, indicating the "Chinese line" while eliminating the State's border with Nagaland.

संयुक्त राष्ट्र महासभा के प्रस्ताव पर महीनों चली चर्चा के दौरान 1 जुलाई को सामने आए इस मानचित्र में अरुणाचल की असम के साथ दक्षिणी राज्य सीमा को "चीनी रेखा" के रूप में दर्शाया गया है, जबकि नागालैंड के साथ राज्य की सीमा को हटा दिया गया है।

- It shows the State's northern border, indicating the "Indian line".

इसमें राज्य की उत्तरी सीमा को "भारतीय रेखा" के रूप में दर्शाया गया है।

- Similarly, the map shows Aksai Chin's eastern borders, indicating the "Indian Line" while presenting the western borders of Aksai Chin in what appears to be the "Chinese line".

इसी प्रकार, मानचित्र में अक्साई चिन की पूर्वी सीमाओं को "भारतीय रेखा" के रूप में दर्शाया गया है, जबकि अक्साई चिन की पश्चिमी सीमाओं को ऐसी रेखा के रूप में प्रस्तुत किया गया है जो "चीनी रेखा" प्रतीत होती है।

- These "claim lines" appear to be a continuation of previous similar maps of the UN. ये "दावा-रेखाएँ" संयुक्त राष्ट्र के पिछले इसी प्रकार के मानचित्रों की निरंतरता प्रतीत होती हैं।
- But unlike in the 2011 map of the UN, these lines are not specified as "claim lines" in the July 1 map. लेकिन संयुक्त राष्ट्र के 2011 के मानचित्र के विपरीत, 1 जुलाई के मानचित्र में इन रेखाओं को "दावा-रेखाओं" के रूप में स्पष्ट रूप से निर्दिष्ट नहीं किया गया है।
- The map depicts Jammu and Kashmir with a dotted line indicating the Line of Control (LoC) between India and Pakistan.



मानचित्र में जम्मू-कश्मीर को भारत और पाकिस्तान के बीच नियंत्रण रेखा (LoC) को दर्शाने वाली बिंदीदार रेखा के साथ प्रदर्शित किया गया है।

- However, the issue of the LoC is clearly mentioned in a brief note on the map, explaining the “dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan.

हालाँकि, मानचित्र पर दिए गए एक संक्षिप्त नोट में नियंत्रण रेखा के मुद्दे का स्पष्ट उल्लेख किया गया है, जिसमें बताया गया है कि “बिंदीदार रेखा जम्मू-कश्मीर में भारत और पाकिस्तान द्वारा सहमत लगभग नियंत्रण रेखा को दर्शाती है।”

- But, there is no note on why the “Map of the World” issued by the UN during the consultation process and endorsed by the **“Correct the Map” resolution sponsored by Togo and supported by the African Union** depicted Arunachal and Aksai Chin as territories caught between Indian and Chinese claim lines.

लेकिन इस बात पर कोई टिप्पणी नहीं है कि परामर्श प्रक्रिया के दौरान संयुक्त राष्ट्र द्वारा जारी और टोगो द्वारा प्रायोजित तथा अफ्रीकी संघ द्वारा समर्थित “Correct the Map” प्रस्ताव द्वारा अनुमोदित “Map of the World” में अरुणाचल और अक्साई चिन को भारतीय और चीनी दावा-रेखाओं के बीच स्थित क्षेत्रों के रूप में क्यों दर्शाया गया।

- The map is non-binding, but it will be used by multilateral institutions worldwide. यह मानचित्र बाध्यकारी नहीं है, लेकिन दुनिया भर के बहुपक्षीय संस्थानों द्वारा इसका उपयोग किया जाएगा।

‘Cognitive justice’

‘संज्ञानात्मक न्याय’

- Discussions on the map began in March 2026 when the African Union supported the “Equal Earth cartographic projection to more accurately represent Africa”. मानचित्र पर चर्चा मार्च 2026 में शुरू हुई, जब अफ्रीकी संघ ने “अफ्रीका को अधिक सटीक रूप से प्रदर्शित करने के लिए Equal Earth मानचित्रण प्रक्षेपण” का समर्थन किया।
- In relation to India’s ongoing Kalapani border controversy with Nepal, the map seems to have gone in favour of India, as it reflects India’s control over the Kalapani-Lipulekh-Limpiyadhura region, which is claimed by Nepal.

नेपाल के साथ भारत के जारी कालापानी सीमा विवाद के संबंध में यह मानचित्र भारत के पक्ष में जाता हुआ प्रतीत होता है, क्योंकि इसमें कालापानी-लिपुलेख-लिम्पियाधुरा क्षेत्र पर भारत का नियंत्रण दर्शाया गया है, जिस पर नेपाल अपना दावा करता है।



GS II: IR

Natural partners

India and Belgium are building ties across sectors despite differences

In terms of size and engagement, Belgium is not one of India's most important partners. However, the visit of the Belgian Prime Minister to Delhi is part of a larger puzzle of India's ties with European countries. These have now gained salience with focus areas for India: in economic relations, defence relations and strategic ties. At the top of the agenda in talks between Prime Ministers Bart De Wever and Narendra Modi was bilateral trade opportunities once the India-European Union Free Trade Agreement (FTA) is signed — which is expected in December. India-Belgium trade is about \$13 billion, a third of which is from over a century of collaboration in the diamond industry. Antwerp is a global hub for diamond trading, while Mumbai and Surat provide the biggest cutting and polishing services. However, once the EU FTA is signed, they hope to benefit from collaboration in other areas including renewable energy and food processing; the Prime Ministers agreed to set a target of doubling bilateral trade in the next five years. Despite being surrounded by friendly European allies, Belgium has a robust high-tech defence industry — small arms, drone and counter-drone technology, ammunition and naval defence — and is keen to make inroads in the Indian market, with India seeking to diversify its procurement beyond global powers. The two sides agreed on an MoU for co-development of military hardware, and signed a letter of intent on defence cooperation. India will appoint a resident defence attaché to Brussels, complementing Belgium's move.

Statements by the two leaders, however, indicated that the visit went beyond the bilateral to a more geopolitical framing of strategic ties, both bilateral as well as between India and Europe. At a business event, Mr. De Wever said that Europe is now realising the truth of India's "warnings" on strategic autonomy from global powers and over dependence in trade and industrial production, in particular referring to China. After the talks, Mr. Modi said that democratic values, a market economy, and people-to-people ties make India and Belgium "natural partners", a theme he has promoted this past year, as he has stepped up visits to Europe and received a number of European leaders in Delhi, in the run-up to his Brussels visit later this year for the FTA. It is also significant that Mr. De Wever's visit comes in the same week that New Delhi is preparing to welcome Russian President Vladimir Putin for the BRICS summit in Delhi. The engagement with Belgium demonstrates a new maturity for both European countries and India. This shows sensitivity to their respective positions on the Russia-Ukraine conflict, indicating that ties outweigh Europe's enmity and India's deep friendship with Moscow.

08S9. Natural partners

स्वाभाविक साझेदार

• However, the visit of the Belgian Prime Minister to Delhi is part of a larger puzzle of India's ties with European countries. हालाँकि, बेल्जियम के प्रधानमंत्री की दिल्ली यात्रा यूरोपीय देशों के साथ भारत के संबंधों की एक व्यापक तस्वीर का हिस्सा है।

• At the top of the agenda in talks between Prime Ministers Bart De Wever and Narendra Modi was bilateral trade opportunities once the India-European Union Free Trade Agreement (FTA) is signed — which is expected in December.

प्रधानमंत्री Bart De Wever और Narendra Modi के बीच वार्ता के एजेंडे में सबसे ऊपर द्विपक्षीय व्यापार के अवसर रहे, जो भारत-यूरोपीय संघ मुक्त व्यापार समझौते (FTA) पर हस्ताक्षर होने के बाद उत्पन्न होंगे—जिसके दिसंबर में होने की उम्मीद है।

• India Belgium trade is about \$13 billion, a third of which is from over a century of collaboration in the diamond industry.

भारत-बेल्जियम व्यापार लगभग 13 अरब डॉलर का है, जिसमें एक-तिहाई हिस्सा हीरा उद्योग में एक सदी से अधिक पुराने सहयोग से आता है।

• Antwerp is a global hub for diamond trading, while Mumbai and Surat provide the biggest cutting and polishing services.

Antwerp हीरा व्यापार का एक वैश्विक केंद्र है, जबकि मुंबई और सूरत सबसे बड़ी कटिंग और पॉलिशिंग सेवाएँ प्रदान करते हैं।

• However, once the EU FTA is signed, they hope to benefit from collaboration in other areas including renewable energy and food processing; the Prime Ministers agreed to set a target of doubling bilateral trade in the next five years.

हालाँकि, EU FTA पर हस्ताक्षर होने के बाद, उन्हें नवीकरणीय ऊर्जा और खाद्य प्रसंस्करण सहित अन्य क्षेत्रों में सहयोग से लाभ मिलने की उम्मीद है; दोनों प्रधानमंत्रियों ने अगले पाँच वर्षों में द्विपक्षीय व्यापार को दोगुना करने का लक्ष्य निर्धारित करने पर सहमति व्यक्त की।

• Despite being surrounded by friendly European allies, Belgium has a robust high-tech defence industry — small arms, drone and counter-drone technology, ammunition and naval defence — and is keen to make inroads in the Indian market, with India seeking to diversify its procurement beyond global powers. मित्रवत यूरोपीय सहयोगियों से घिरे होने के बावजूद, बेल्जियम का एक मजबूत उच्च-प्रौद्योगिकी रक्षा उद्योग है—जिसमें छोटे हथियार, ड्रोन और काउंटर-ड्रोन प्रौद्योगिकी, गोला-बारूद तथा नौसैनिक रक्षा शामिल हैं—और वह भारतीय बाजार में अपनी पैठ बनाने के लिए उत्सुक है, जबकि भारत वैश्विक शक्तियों से आगे अपने रक्षा खरीद स्रोतों में विविधता लाने का प्रयास कर रहा है।

• The two sides agreed on an MoU for co-development of military hardware, and signed a letter of intent on defence cooperation.

दोनों पक्षों ने सैन्य उपकरणों के सह-विकास के लिए एक समझौता ज्ञापन (MoU) पर सहमति व्यक्त की और रक्षा सहयोग पर आशय पत्र पर हस्ताक्षर किए।

- India will appoint a resident defence attaché to Brussels, complementing Belgium's move. भारत ब्रुसेल्स में एक स्थायी रक्षा अताशे नियुक्त करेगा, जो बेल्जियम की इसी प्रकार की पहल का पूरक होगा।
- Statements by the two leaders, however, indicated that the visit went beyond the bilateral to a more geopolitical framing of strategic ties, both bilateral as well as between India and Europe.



हालाँकि, दोनों नेताओं के बयानों से संकेत मिला कि यह यात्रा द्विपक्षीय संबंधों से आगे बढ़कर **रणनीतिक संबंधों के अधिक भू-राजनीतिक परिप्रेक्ष्य** तक पहुँची, जिसमें भारत-बेल्जियम तथा भारत-यूरोप दोनों के संबंध शामिल हैं।

- At a business event, Mr. De Wever said that Europe is now realising the truth of India's "warnings" on strategic autonomy from global powers and over dependence in trade and industrial production, in particular referring to China.
एक व्यावसायिक कार्यक्रम में **श्री De Wever** ने कहा कि यूरोप अब वैश्विक शक्तियों से **रणनीतिक स्वायत्तता** तथा व्यापार और औद्योगिक उत्पादन में अत्यधिक निर्भरता के संबंध में भारत की "चेतावनियों" की सच्चाई को समझ रहा है, विशेष रूप से चीन के संदर्भ में।
- After the talks, Mr. Modi said that democratic values, a market economy, and people-to-people ties make India and Belgium "natural partners", a theme he has promoted this past year, as he has stepped up visits to Europe and received a number of European leaders in Delhi, in the run-up to his Brussels visit later this year for the FTA.
वार्ता के बाद, **श्री मोदी** ने कहा कि लोकतांत्रिक मूल्य, बाजार अर्थव्यवस्था और **जन-से-जन संबंध** भारत और बेल्जियम को "स्वाभाविक साझेदार" बनाते हैं, यह ऐसा विषय है जिसे उन्होंने पिछले एक वर्ष में बढ़ावा दिया है, क्योंकि उन्होंने यूरोप की अपनी यात्राएँ बढ़ाई हैं और इस वर्ष के अंत में FTA के लिए अपनी **ब्रुसेल्स यात्रा** से पहले दिल्ली में कई यूरोपीय नेताओं की मेजबानी की है।
- It is also significant that Mr. De Wever's visit comes in the same week that New Delhi is preparing to welcome Russian President Vladimir Putin for the BRICS summit in Delhi.
यह भी महत्वपूर्ण है कि **श्री De Wever की यात्रा** उसी सप्ताह हो रही है, जब नई दिल्ली **BRICS शिखर सम्मेलन** के लिए रूसी राष्ट्रपति Vladimir Putin के स्वागत की तैयारी कर रही है।
- The engagement with Belgium demonstrates a new maturity for both European countries and India.
बेल्जियम के साथ यह **सहभागिता यूरोपीय देशों और भारत दोनों की नई परिपक्वता** को दर्शाती है।
- This shows sensitivity to their respective positions on the Russia-Ukraine conflict, indicating that ties outweigh Europe's enmity and India's deep friendship with Moscow.
यह **रूस-यूक्रेन संघर्ष पर दोनों के संबंधित रुख के प्रति संवेदनशीलता** को दर्शाता है, जो संकेत देता है कि संबंध यूरोप की शत्रुता और भारत की मॉस्को के साथ गहरी मित्रता से अधिक महत्वपूर्ण हैं।

India's opportunity to put BRICS back together

GS II: IR

BRICS has strayed quite far from where it started. To be held this weekend (September 12-13, 2026) the 18th BRICS Summit, in New Delhi, gives India a huge opportunity to bring coherence back to the expanded group and give it direction if it is to be an effective body in shaping global events.

BRICS was formed to give a greater voice to Brazil, Russia, India, China and South Africa, the emerging economies, in global governance and institutions, particularly financial and economic institutions, and to aim for a more equitable multilateral order. India was initially an enthusiastic participant, seeing the group as a vehicle for genuine reform of multilateral institutions. The first summit hosted by India (the fourth BRICS summit), in 2012, focused on the theme "Global Stability, Security and Prosperity," tacitly reflecting a much broader geopolitical canvas. The Indian presidency helped lead to the establishment of the BRICS Bank, the New Development Bank. Other Indian initiatives followed, including the integration of a counter-terrorism architecture into BRICS' work.

The emergence of the China challenge

However, China had other plans. At the time, even if it was not anti-West, China saw BRICS as a counterpoise to western domination – a view that India also initially shared in the context of reform. More importantly, China needed a group such as BRICS, consisting of emerging economies, to amplify its global ambitions, given that BRICS countries accounted for nearly 20% of world GDP in 2010. Further, China wanted to use BRICS mechanisms such as BRICS-Plus and BRICS Outreach to reach out to the Global South and consolidate their profile as a second pole in a future bipolar world.

Suddenly, India not only had a reform agenda on its hands but also had to act as a counterweight to China's larger designs on BRICS. India, Brazil and South Africa soon realised that Chinese support for the reform of multilateral institutions was selective. For example, China resisted supporting the three countries' bid for permanent seats on the United Nations Security Council. Consequently, India started focusing more on BRICS consolidation and intra-BRICS matters to resist Chinese grandstanding. In fact, this year's theme for India's chairship has four pillars – Resilience, Innovation, Cooperation and Sustainability – and draws on Prime Minister Narendra Modi's vision of "Humanity First" and a "people-centric" approach to BRICS cooperation.

In addition, there was a real danger that the principle of consensus, which had kept BRICS a cohesive group, would be bypassed and that BRICS would go the way of the Shanghai Cooperation Organisation (SCO), where the majority can bulldoze their views through. India and Brazil resisted these efforts. The 2019 BRICS Summit in Brasilia was held without any other invited guest countries – just the five original members. But in 2020, under the Russian presidency, probably the first non-consensus chair's statement on COVID-19 was issued,



T.S. Tirumurti

Chair,
Steering Committee,
Deccan Centre
for International
Relations,
former Permanent
Representative of
India to the United
Nations, New York,
and former Sherpa
of BRICS

bypassing the sacred principle of consensus. If non-consensus documents are increasingly resorted to, as we saw at the BRICS Foreign Ministers' meeting in May 2026 in New Delhi due to the inability of the new members to agree, then BRICS will cease to be effective.

Membership expansion tests BRICS cohesion

But then, it was difficult to resist the Chinese juggernaut. China pushed for the expansion of the New Development Bank and then for the expansion of BRICS itself. India resisted, as did Brazil. But that was not to be, and BRICS now has 11 members, following the addition of Egypt, Ethiopia, Iran, Saudi Arabia, the United Arab Emirates and Indonesia, as well as 10 partner countries.

India's sagacity has now been vindicated, as the new members of BRICS have started fighting among themselves. While the original five have their differences, some of them serious, they know how to address them with maturity for the greater good of the group. The new members do not have any such compunctions and are subverting BRICS through their bilateral conflicts. BRICS should not go the way of the South Asian Association for Regional Cooperation (SAARC), with bilateral disputes paralysing the group.

In addition, the tussle over the direction BRICS should take has begun. India has tried to keep BRICS as a "non-West" group, as opposed to the increasing pressure from some members to turn BRICS into an anti-West group. An anti-West slant is becoming increasingly difficult to avoid, with China competing with the United States for global leadership, Russia at war with Ukraine with the full backing of Europe, and Iran being bombarded by the U.S. and Israel. It becomes even harder to maintain the "non-West" line when Brazil and India have been subjected to punitive tariffs by U.S. President Donald Trump, and the U.S. Congress is considering legislation that would give the President the power to levy punitive tariffs on countries importing Russian oil. The question being asked is: how can India stop BRICS from becoming anti-West at a time when the Quad (Australia, India, Japan, the U.S.) is being emasculated by the U.S., India-U.S. relations are under great pressure, Pakistan is being courted by the U.S. at India's expense, and global institutions are being made dysfunctional by the West? The more erratic the U.S. is vis-à-vis BRICS, the greater the chances of BRICS going in the wrong direction. Fortunately, India's effort to prevent an anti-western drift is shared by many other BRICS members, since they too have much to gain by engaging with multiple actors from different camps in their national interest. They want change, but not geopolitical realignment with China and Russia. This is the direction of BRICS's future.

But there is a much larger question. Both the U.S. and China are enunciating parallel visions of the world and playing by their own rules, rather than internationally negotiated ones. Both are, in effect, challenging existing international norms and global institutions and setting up parallel

structures and standards in emerging areas such as Artificial Intelligence, digital and Internet governance, data ownership, state control, 5G/6G and telecom, satellite navigation, and electric vehicles. Neither is looking for reform of existing institutions. China has just set up a new World AI Cooperation Organisation in Shanghai, in addition to other parallel initiatives such as the Asian Infrastructure Investment Bank, the Belt and Road Initiative and the Digital Silk Road, which challenge the Bretton Woods institutions and their governance and financing models. They see BRICS as one of the vehicles through which to pursue their broader goals. For example, the push for de-dollarisation through the establishment of a parallel BRICS currency is receiving a lukewarm response, since many members are uncomfortable with a renminbi-dominated currency and would prefer merely interlinking payment systems, central bank digital currencies and national-currency transactions. Nevertheless, after the success of its pilot project, China is formally launching its ambitious mBridge, an alternative financial payment system. The last thing India wants is an alternative Bretton Woods system dominated by China.

India can course correct BRICS

The 2026 Summit in Delhi provides an opportunity for course correction, and India has worked hard to persuade the new members to overcome their political differences. In a world in flux, India has to revive the original *raison d'être* of BRICS and shape the expanded grouping into a vehicle for reform and stability, while stopping others from hijacking it.

At the 2018 BRICS Summit in South Africa, Mr. Modi first articulated his vision of "reformed multilateralism" at the leaders' retreat. By 2019, this vision had found its way into the BRICS Summit document in Brasilia, with India, Brazil and South Africa pushing for it. The time has come to revive this agenda and make BRICS a strong voice for the "non-West" middle powers – and, by extension, for the Global South.

In Davos, the Canadian Prime Minister spoke about broadly West-centric middle powers coming together. A Global South middle power is very different. And if there is a credible organisation of Global South middle powers, it is BRICS. It has its problems. To begin with, China is hardly a middle power and has disproportionate influence within BRICS. India and China need to find greater synergy on emerging global issues, even as their bilateral differences are being contained. Further, some middle powers that ought to be there are not represented in BRICS. However imperfect its composition may be, it is clear that BRICS has great geopolitical and geo-economic potential.

At a time when the profile of BRICS is only increasing, with many countries wanting to join it, India should proactively embrace the BRICS reform agenda to serve its larger interest of multi-alignment. If India does not, others will take BRICS in a different direction.

The Delhi summit offers India an opportunity to restore BRICS's original purpose

08S9. India's opportunity to put BRICS back together

BRICS को फिर से एकजुट करने का भारत के पास अवसर

- BRICS has strayed quite far from where it started.
BRICS अपने मूल उद्देश्य से काफी दूर भटक गया है।
- To be held this weekend (September 12-13, 2026) the 18th BRICS Summit, in New Delhi, gives India a huge opportunity to bring coherence back to the expanded group and give it direction if it is to be an effective body in shaping global events.
इस सप्ताहांत (12-13 सितंबर, 2026) नई दिल्ली में आयोजित होने वाला 18वाँ BRICS शिखर सम्मेलन



भारत को विस्तारित समूह में फिर से सामंजस्य स्थापित करने और उसे दिशा देने का एक बड़ा अवसर प्रदान करता है, यदि इसे वैश्विक घटनाक्रमों को आकार देने वाला एक प्रभावी निकाय बनाना है।

- BRICS was formed to give a greater voice to Brazil, Russia, India, China and South Africa, the emerging economies, in global governance and institutions, particularly financial and economic institutions, and to aim for a more equitable multilateral order.

BRICS का गठन ब्राज़ील, रूस, भारत, चीन और दक्षिण अफ्रीका जैसी उभरती अर्थव्यवस्थाओं को वैश्विक शासन और संस्थाओं, विशेषकर वित्तीय एवं आर्थिक संस्थाओं में अधिक प्रभावी आवाज़ देने तथा अधिक न्यायसंगत बहुपक्षीय व्यवस्था का लक्ष्य रखने के लिए किया गया था।

- India was initially an enthusiastic participant, seeing the group as a vehicle for genuine reform of multilateral institutions.

भारत प्रारंभ में इसका उत्साही भागीदार था और इस समूह को बहुपक्षीय संस्थाओं में वास्तविक सुधार के माध्यम के रूप में देखता था।

- The first summit hosted by India (the fourth BRICS summit), in 2012, focused on the theme “Global Stability, Security and Prosperity,” tacitly reflecting a much broader geopolitical canvas.

भारत द्वारा 2012 में आयोजित पहले शिखर सम्मेलन (चौथे BRICS शिखर सम्मेलन) का विषय “Global Stability, Security and Prosperity” था, जो अप्रत्यक्ष रूप से एक व्यापक भू-राजनीतिक परिदृश्य को प्रतिबिंबित करता था।

- The Indian presidency helped lead to the establishment of the BRICS Bank, the New Development Bank.

भारतीय अध्यक्षता ने BRICS Bank, अर्थात् New Development Bank की स्थापना में योगदान दिया।

The emergence of the China challenge

चीन की चुनौती का उभरना

- However, China had other plans. हालाँकि, चीन की अन्य योजनाएँ थीं।
- At the time, even if it was not anti-West, China saw BRICS as a counterpoise to western domination — a view that India also initially shared in the context of reform. उस समय, भले ही चीन पश्चिम-विरोधी नहीं था, लेकिन वह BRICS को पश्चिमी प्रभुत्व के विरुद्ध एक प्रतिसंतुलन के रूप में देखता था—सुधार के संदर्भ में भारत का दृष्टिकोण भी प्रारंभ में ऐसा ही था।
- More importantly, China needed a group such as BRICS, consisting of emerging economies, to amplify its global ambitions, given that BRICS countries accounted for nearly 20% of world GDP in 2010.

इससे भी महत्वपूर्ण बात यह थी कि चीन को अपनी वैश्विक महत्वाकांक्षाओं को बढ़ाने के लिए BRICS जैसे उभरती अर्थव्यवस्थाओं वाले समूह की आवश्यकता थी, क्योंकि 2010 में BRICS देशों का विश्व GDP में लगभग 20% हिस्सा था।

- Further, China wanted to use BRICS mechanisms such as BRICS-Plus and BRICS Outreach to reach out to the Global South and consolidate their profile as a second pole in a future bipolar world.

इसके अतिरिक्त, चीन BRICS-Plus और BRICS Outreach जैसे तंत्रों का उपयोग ग्लोबल साउथ तक पहुँच बनाने और भविष्य की द्विध्रुवीय दुनिया में स्वयं को दूसरे ध्रुव के रूप में स्थापित करने के लिए करना चाहता था।

- Suddenly, India not only had a reform agenda on its hands but also had to act as a counterweight to China's larger designs on BRICS. अचानक, भारत के सामने न केवल सुधार का एजेंडा था, बल्कि उसे BRICS के संबंध में चीन की व्यापक योजनाओं के विरुद्ध प्रतिसंतुलन के रूप में भी कार्य करना पड़ा।
- India, Brazil and South Africa soon realised that Chinese support for the reform of multilateral institutions was selective.

भारत, ब्राज़ील और दक्षिण अफ्रीका ने जल्द ही महसूस किया कि बहुपक्षीय संस्थाओं के सुधार के लिए चीन का समर्थन चयनात्मक था।

- For example, China resisted supporting the three countries' bid for permanent seats on the United Nations Security Council.
उदाहरण के लिए, चीन ने इन तीनों देशों की संयुक्त राष्ट्र सुरक्षा परिषद में स्थायी सीटों की दावेदारी का समर्थन करने का विरोध किया।
- Consequently, India started focusing more on BRICS consolidation and intra-BRICS matters to resist Chinese grandstanding.
परिणामस्वरूप, भारत ने चीन के दिखावटी प्रभुत्व का प्रतिरोध करने के लिए BRICS के सुदृढ़ीकरण और BRICS के आंतरिक मामलों पर अधिक ध्यान देना शुरू किया।
- In fact, this year's theme for India's chairship has four pillars — Resilience, Innovation, Cooperation and Sustainability — and draws on Prime Minister Narendra Modi's vision of "Humanity First" and a "people-centric" approach to BRICS cooperation.
वास्तव में, इस वर्ष भारत की अध्यक्षता का विषय चार स्तंभों—लचीलापन, नवाचार, सहयोग और स्थिरता—पर आधारित है तथा यह प्रधानमंत्री नरेंद्र मोदी के "Humanity First" और BRICS सहयोग के "जन-केंद्रित" दृष्टिकोण के दृष्टिकोण से प्रेरित है।
- In addition, there was a real danger that the principle of consensus, which had kept BRICS a cohesive group, would be bypassed and that BRICS would go the way of the Shanghai Cooperation Organisation (SCO), where the majority can bulldoze their views through.
इसके अतिरिक्त, वास्तविक खतरा यह था कि सर्वसम्मति का सिद्धांत, जिसने BRICS को एकजुट समूह बनाए रखा था, दरकिनार कर दिया जाएगा और BRICS भी Shanghai Cooperation Organisation (SCO) के रास्ते पर चला जाएगा, जहाँ बहुमत अपने विचारों को बलपूर्वक लागू कर सकता है।
- India and Brazil resisted these efforts.
भारत और ब्राज़ील ने इन प्रयासों का विरोध किया।
- The 2019 BRICS Summit in Brasilia was held without any other invited guest countries — just the five original members.
2019 में ब्रासीलिया में BRICS शिखर सम्मेलन किसी अन्य आमंत्रित अतिथि देश के बिना आयोजित हुआ— इसमें केवल पाँच मूल सदस्य शामिल थे।
- But in 2020, under the Russian presidency, probably the first non-consensus chair's statement on COVID-19 was issued, bypassing the sacred principle of consensus.
लेकिन 2020 में रूसी अध्यक्षता के दौरान COVID-19 पर संभवतः पहला गैर-सर्वसम्मति अध्यक्षीय वक्तव्य जारी किया गया, जिसने सर्वसम्मति के महत्वपूर्ण सिद्धांत को दरकिनार कर दिया।
- If non-consensus documents are increasingly resorted to, as we saw at the BRICS Foreign Ministers' meeting in May 2026 in New Delhi due to the inability of the new members to agree, then BRICS will cease to be effective.
यदि गैर-सर्वसम्मति दस्तावेजों का बढ़ता सहारा लिया जाता है, जैसा कि मई 2026 में नई दिल्ली में BRICS विदेश मंत्रियों की बैठक में नए सदस्यों के बीच सहमति न बन पाने के कारण देखा गया, तो BRICS प्रभावी नहीं रह जाएगा।

Membership expansion tests BRICS cohesion सदस्यता विस्तार ने BRICS की एकजुटता की परीक्षा ली

- But then, it was difficult to resist the Chinese juggernaut.
लेकिन इसके बाद चीनी प्रभाव की विशाल शक्ति का प्रतिरोध करना कठिन था।
- China pushed for the expansion of the New Development Bank and then for the expansion of BRICS itself.
चीन ने पहले New Development Bank के विस्तार और फिर स्वयं BRICS के विस्तार पर जोर दिया।

- India resisted, as did Brazil.
भारत ने इसका विरोध किया, जैसा कि ब्राज़ील ने भी किया।
- But that was not to be, and BRICS now has 11 members, following the addition of Egypt, Ethiopia, Iran, Saudi Arabia, the United Arab Emirates and Indonesia, as well as 10 partner countries.
लेकिन ऐसा नहीं हो सका और अब BRICS में 11 सदस्य हैं, जिनमें मिस्र, इथियोपिया, ईरान, सऊदी अरब, संयुक्त अरब अमीरात और इंडोनेशिया के साथ-साथ 10 साझेदार देश भी शामिल हैं।
- India's sagacity has now been vindicated, as the new members of BRICS have started fighting among themselves.
अब भारत की दूरदर्शिता सही साबित हुई है, क्योंकि BRICS के नए सदस्य आपस में संघर्ष करने लगे हैं।
- While the original five have their differences, some of them serious, they know how to address them with maturity for the greater good of the group.
यद्यपि मूल पाँच सदस्यों के बीच मतभेद हैं, जिनमें कुछ गंभीर भी हैं, फिर भी वे समूह के व्यापक हित के लिए परिपक्वता के साथ उनका समाधान करना जानते हैं।
- The new members do not have any such compunctions and are subverting BRICS through their bilateral conflicts.
नए सदस्यों में ऐसी कोई झिझक नहीं है और वे अपने द्विपक्षीय संघर्षों के माध्यम से BRICS को कमजोर कर रहे हैं।
- BRICS should not go the way of the South Asian Association for Regional Cooperation (SAARC), with bilateral disputes paralysing the group.
BRICS को South Asian Association for Regional Cooperation (SAARC) की तरह नहीं बनना चाहिए, जहाँ द्विपक्षीय विवादों ने समूह को पंगु बना दिया है।
- In addition, the tussle over the direction BRICS should take has begun.
इसके अतिरिक्त, BRICS को किस दिशा में आगे बढ़ना चाहिए, इसे लेकर खींचतान शुरू हो गई है।
- India has tried to keep BRICS as a "non-West" group, as opposed to the increasing pressure from some members to turn BRICS into an anti-West group.
भारत ने BRICS को एक "गैर-पश्चिमी" समूह बनाए रखने का प्रयास किया है, जबकि कुछ सदस्य BRICS को पश्चिम-विरोधी समूह में बदलने के लिए बढ़ता दबाव बना रहे हैं।
- An anti-West slant is becoming increasingly difficult to avoid, with China competing with the United States for global leadership, Russia at war with Ukraine with the full backing of Europe, and Iran being bombarded by the U.S. and Israel.
पश्चिम-विरोधी झुकाव से बचना लगातार कठिन होता जा रहा है, क्योंकि चीन वैश्विक नेतृत्व के लिए अमेरिका के साथ प्रतिस्पर्धा कर रहा है, रूस यूरोप के पूर्ण समर्थन के साथ यूक्रेन के साथ युद्ध में है और ईरान पर अमेरिका तथा इज़राइल द्वारा बमबारी की जा रही है।
- It becomes even harder to maintain the "non-West" line when Brazil and India have been subjected to punitive tariffs by U.S. President Donald Trump, and the U.S. Congress is considering legislation that would give the President the power to levy punitive tariffs on countries importing Russian oil.
जब ब्राज़ील और भारत को अमेरिकी राष्ट्रपति Donald Trump द्वारा दंडात्मक टैरिफ का सामना करना पड़ा है और अमेरिकी कांग्रेस ऐसे कानून पर विचार कर रही है जो राष्ट्रपति को रूसी तेल आयात करने वाले देशों पर दंडात्मक टैरिफ लगाने की शक्ति देगा, तब "गैर-पश्चिमी" रुख बनाए रखना और भी कठिन हो जाता है।
- The question being asked is: how can India stop BRICS from becoming anti-West at a time when the Quad (Australia, India, Japan, the U.S.) is being emasculated by the U.S., India-U.S. relations are under great pressure, Pakistan is being courted by the U.S. at India's expense, and global institutions are being made dysfunctional by the West?
सवाल यह उठाया जा रहा है: ऐसे समय में भारत BRICS को पश्चिम-विरोधी बनने से कैसे रोक सकता है, जब Quad (ऑस्ट्रेलिया, भारत, जापान, अमेरिका) को अमेरिका द्वारा कमजोर किया जा रहा है, भारत-अमेरिका संबंध अत्यधिक दबाव में हैं, भारत की कीमत पर पाकिस्तान को अमेरिका द्वारा अपने करीब लाया जा रहा है और पश्चिम द्वारा वैश्विक संस्थाओं को अकार्यात्मक बनाया जा रहा है?

- The more erratic the U.S. is vis-à-vis BRICS, the greater the chances of BRICS going in the wrong direction.
BRICS के प्रति अमेरिका जितना अधिक **अनिश्चित और अस्थिर** होगा, BRICS के गलत दिशा में जाने की संभावना उतनी ही अधिक होगी।
- Fortunately, India's effort to prevent an anti-western drift is shared by many other BRICS members, since they too have much to gain by engaging with multiple actors from different camps in their national interest.
सौभाग्य से, **पश्चिम-विरोधी झुकाव को रोकने का भारत का प्रयास** कई अन्य BRICS सदस्यों द्वारा भी साझा किया जाता है, क्योंकि अपने राष्ट्रीय हित में विभिन्न गुटों के अनेक पक्षों के साथ जुड़कर उन्हें भी काफी लाभ प्राप्त हो सकता है।
- They want change, but not geopolitical realignment with China and Russia.
वे **परिवर्तन चाहते हैं**, लेकिन चीन और रूस के साथ भू-राजनीतिक पुनर्संरचना नहीं चाहते।
- This is the direction of BRICS's future.
यही **BRICS के भविष्य की दिशा** है।
- But there is a much larger question.
लेकिन इससे भी **बड़ा प्रश्न** मौजूद है।
- Both the U.S. and China are enunciating parallel visions of the world and playing by their own rules, rather than internationally negotiated ones.
अमेरिका और चीन दोनों दुनिया के लिए **समानांतर दृष्टिकोण** प्रस्तुत कर रहे हैं और अंतरराष्ट्रीय स्तर पर बातचीत से तय नियमों के बजाय अपने-अपने नियमों के अनुसार कार्य कर रहे हैं।
- Both are, in effect, challenging existing international norms and global institutions and setting up parallel structures and standards in emerging areas such as Artificial Intelligence, digital and Internet governance, data ownership, state control, 5G/6G and telecom, satellite navigation, and electric vehicles.
वास्तव में, दोनों मौजूदा **अंतरराष्ट्रीय मानदंडों और वैश्विक संस्थाओं को चुनौती** दे रहे हैं तथा कृत्रिम बुद्धिमत्ता, डिजिटल और इंटरनेट शासन, डेटा स्वामित्व, राज्य नियंत्रण, 5G/6G और दूरसंचार, उपग्रह नेविगेशन तथा इलेक्ट्रिक वाहनों जैसे उभरते क्षेत्रों में **समानांतर संरचनाएँ और मानक** स्थापित कर रहे हैं।
- Neither is looking for reform of existing institutions.
इनमें से कोई भी मौजूदा संस्थाओं के **सुधार** की दिशा में प्रयासरत नहीं है।
- China has just set up a new World AI Cooperation Organisation in Shanghai, in addition to other parallel initiatives such as the Asian Infrastructure Investment Bank, the Belt and Road Initiative and the Digital Silk Road, which challenge the Bretton Woods institutions and their governance and financing models.
चीन ने हाल ही में शंघाई में एक नया **World AI Cooperation Organisation** स्थापित किया है, इसके अतिरिक्त **Asian Infrastructure Investment Bank, Belt and Road Initiative और Digital Silk Road** जैसी अन्य समानांतर पहलें भी हैं, जो **Bretton Woods संस्थाओं तथा उनके शासन और वित्तपोषण मॉडल** को चुनौती देती हैं।
- They see BRICS as one of the vehicles through which to pursue their broader goals.
वे BRICS को अपने **व्यापक लक्ष्यों को आगे बढ़ाने के माध्यमों** में से एक के रूप में देखते हैं।
- For example, the push for de-dollarisation through the establishment of a parallel BRICS currency is receiving a lukewarm response, since many members are uncomfortable with a renminbi-dominated currency and would prefer merely interlinking payment systems, central bank digital currencies and national-currency transactions.
उदाहरण के लिए, एक **समानांतर BRICS मुद्रा की स्थापना के माध्यम से डी-डॉलराइजेशन** को अपेक्षाकृत ठंडी प्रतिक्रिया मिल रही है, क्योंकि कई सदस्य रेनमिन्बी-प्रभुत्व वाली मुद्रा को लेकर असहज हैं और केवल **भुगतान प्रणालियों, केंद्रीय बैंक डिजिटल मुद्राओं तथा राष्ट्रीय-मुद्रा लेनदेन को आपस में जोड़ने** को प्राथमिकता देंगे।
- Nevertheless, after the success of its pilot project, China is formally launching its ambitious mBridge, an alternative financial payment system.

फिर भी, अपने पायलट प्रोजेक्ट की सफलता के बाद चीन अपनी महत्वाकांक्षी mBridge, एक वैकल्पिक वित्तीय भुगतान प्रणाली, को औपचारिक रूप से शुरू कर रहा है।

- The last thing India wants is an alternative Bretton Woods system dominated by China. भारत सबसे कम जिस चीज़ को चाहता है, वह है चीन के प्रभुत्व वाली वैकल्पिक Bretton Woods व्यवस्था।

India can course correct BRICS भारत BRICS की दिशा को सुधार सकता है

- The 2026 Summit in Delhi provides an opportunity for course correction, and India has worked hard to persuade the new members to overcome their political differences. दिल्ली में 2026 का शिखर सम्मेलन दिशा-सुधार का अवसर प्रदान करता है और भारत ने नए सदस्यों को अपने राजनीतिक मतभेदों से ऊपर उठने के लिए राजी करने हेतु काफी प्रयास किया है।
- In a world in flux, India has to revive the original raison d'être of BRICS and shape the expanded grouping into a vehicle for reform and stability, while stopping others from hijacking it. तेज़ी से बदलती दुनिया में भारत को BRICS के मूल अस्तित्व के उद्देश्य (raison d'être) को पुनर्जीवित करना होगा और विस्तारित समूह को सुधार एवं स्थिरता के माध्यम के रूप में आकार देना होगा, साथ ही दूसरों को इसे अपने उद्देश्यों के लिए हड़पने से रोकना होगा।
- At the 2018 BRICS Summit in South Africa, Mr. Modi first articulated his vision of "reformed multilateralism" at the leaders' retreat. 2018 में दक्षिण अफ्रीका में आयोजित BRICS शिखर सम्मेलन में श्री मोदी ने पहली बार नेताओं की बैठक में "reformed multilateralism" की अपनी दृष्टि प्रस्तुत की।
- By 2019, this vision had found its way into the BRICS Summit document in Brasilia, with India, Brazil and South Africa pushing for it. 2019 तक यह दृष्टि ब्रासीलिया के BRICS शिखर सम्मेलन दस्तावेज़ में शामिल हो गई थी, जिसके लिए भारत, ब्राज़ील और दक्षिण अफ्रीका ने जोर दिया था।
- The time has come to revive this agenda and make BRICS a strong voice for the "non-West" middle powers — and, by extension, for the Global South. अब समय आ गया है कि इस एजेंडे को पुनर्जीवित किया जाए और BRICS को "गैर-पश्चिमी" मध्य शक्तियाँ तथा विस्तारतः ग्लोबल साउथ की मजबूत आवाज़ बनाया जाए।
- In Davos, the Canadian Prime Minister spoke about broadly West-centric middle powers coming together. Davos में कनाडा के प्रधानमंत्री ने व्यापक रूप से पश्चिम-केंद्रित मध्य शक्तियों के एकजुट होने की बात की।
- A Global South middle power is very different. ग्लोबल साउथ की मध्य शक्ति इससे काफी अलग होती है।
- And if there is a credible organisation of Global South middle powers, it is BRICS. और यदि ग्लोबल साउथ की मध्य शक्तियों का कोई विश्वसनीय संगठन है, तो वह BRICS है।
- It has its problems. इसके सामने समस्याएँ हैं।
- To begin with, China is hardly a middle power and has disproportionate influence within BRICS. सबसे पहले, चीन शायद ही कोई मध्य शक्ति है और BRICS के भीतर उसका प्रभाव असंगत रूप से अधिक है।
- India and China need to find greater synergy on emerging global issues, even as their bilateral differences are being contained. भारत और चीन को उभरते वैश्विक मुद्दों पर अधिक तालमेल स्थापित करने की आवश्यकता है, भले ही उनके द्विपक्षीय मतभेदों को नियंत्रित किया जा रहा हो।
- Further, some middle powers that ought to be there are not represented in BRICS. इसके अतिरिक्त, कुछ ऐसी मध्य शक्तियाँ जिन्हें BRICS में होना चाहिए, वे इसमें प्रतिनिधित्व नहीं रखती हैं।

- However imperfect its composition may be, it is clear that BRICS has great geopolitical and geo-economic potential.
इसकी संरचना चाहे जितनी अपूर्ण हो, यह स्पष्ट है कि BRICS में भू-राजनीतिक और भू-आर्थिक क्षमता बहुत अधिक है।
- At a time when the profile of BRICS is only increasing, with many countries wanting to join it, India should proactively embrace the BRICS reform agenda to serve its larger interest of multi-alignment.
ऐसे समय में जब BRICS की वैश्विक प्रतिष्ठा लगातार बढ़ रही है और अनेक देश इसमें शामिल होना चाहते हैं, भारत को अपने व्यापक बहु-संरेखण (multi-alignment) के हितों की पूर्ति के लिए BRICS के सुधार एजेंडे को सक्रिय रूप से अपनाना चाहिए।
- If India does not, others will take BRICS in a different direction.
यदि भारत ऐसा नहीं करता है, तो अन्य देश BRICS को किसी अलग दिशा में ले जाएंगे।

Why is BRICS exploring cross-border payments?

How do cross-border payments work? What are the instructions between banks and costs involved in each step? How have transaction times reduced? Why does BRICS want to change the system? What alternatives are being explored? What does India propose?

GS II: IR
Srinivasan Ramani

The story so far:
The 18th BRICS summit in New Delhi to be held in September, with India as the Chair, is expected to push for mechanisms to facilitate cross-border payments between members, including links between digital payment systems and central bank digital currencies (CBDCs), according to a report in *The Hindu businessLine*. Ahead of the summit, finance ministries' and central bank representatives from BRICS countries met in Jaipur on August 12-13 to discuss financial cooperation, payments, and the wider use of national currencies in settling trade between members.

How do current cross-border payments work?

Sending money from one country to another requires a chain of transactions. Let's say, an importer in Cape Town is buying passenger cars from an exporter in Chennai. The payment does not travel directly from the South African bank to the Indian one. It travels via a series of intermediaries called correspondent banks that hold accounts with each other. Since the South African bank does not hold an account with the Indian one (and vice versa), the payment is routed through a larger international bank that deals with both and is typically headquartered in London or New York. Because very few banks hold both rupees and rand, the payment involves converting rand to dollars and dollars to rupees where, in essence, the dollar acts like a vehicle currency, even though no American is involved in the trade.

What is SWIFT?

Now, apart from the money, there are also instructions that travel between the banks. This is handled by SWIFT (Society for Worldwide Interbank Financial Telecommunication), which

The 2024 BRICS report under Russia's chairmanship argued that this part of the financial system is monopolised by a single institution, raising transaction costs

is a Belgium-based cooperative and overseen by the National Bank of Belgium along with the G-10 central banks, including the U.S. Federal Reserve. SWIFT is a messaging network, like a secure post-office. It enables institutions to exchange payment instructions through it and settle amounts separately. It is used directly by more than 11,000 institutions in over 200 countries. Smaller banks reach it indirectly through larger banks that are part of the SWIFT network, which is why it has become crucial and hard to displace.

What are the costs involved in each step?

Every intermediary charges a fee and the currencies are converted twice (rand to dollar and dollar to rupees). So the foreign exchange margins are paid twice. A 2019 BRICS survey of cross-border payment systems, conducted by Brazil, found that Brazilian respondents reported foreign exchange margins of 2.5% with the figure rising to 8.5% for payments in Africa and, in some cases, as high as 20%.

While speed of transactions used to be a major issue, SWIFT claims that its SWIFT Global Payments Innovation has helped reduce transaction times significantly. Some structural delays remain even as the transaction chain has also become thinner. The Bank for International Settlements (BIS) found that active correspondent banking relationships fell by 20% between 2011 and 2018 with regional declines varying from 12% to 30% and Latin America being the worst affected. The reasons for this decline were largely commercial. Payment volumes kept growing during this period, even as they travelled through a smaller network.

Why does BRICS want to change this system?

For developing economies, though, payments in a handful of dominant currencies such as the U.S. dollar, the euro and the Japanese yen expose countries to the monetary policies of the countries that issue them. The 2024 BRICS report under Russia's chairmanship argued that this part of the financial system is monopolised by a single institution, raising transaction costs. Alternatives to the system suffer from the fact that they have to convince a large number of banks and regulators to join before being useful. A bank that uses an alternative system to deal with sanctioned entities – several Russian banks were cut off from SWIFT in 2022, following Russia's invasion of Ukraine – also risks sanctions, which deters others from joining. A sanctions-hit Russia has pushed hardest for an alternative and is also the reason why others are wary of joining one.

What changes can be envisaged in the BRICS discussions?

The idea being explored is a payment system where, instead of payments moving through several correspondent banks with dollar conversions, national payment systems would connect to each other directly. This could be done in pairs as India and Singapore have already done for remittances by linking the former's Unified Payments Interface (UPI) and the latter's PayNow systems. But building bilateral systems individually will not scale appropriately.

An alternative could be via a shared hub that each country joins. One such effort is Project Nexus, designed by the BIS and handed over to a company set up by six central banks, including India's Reserve Bank of India. It is set to go live only in 2027. Notably, it is not a BRICS initiative.

The BRICS discussions would extend this idea to the use of central bank digital currencies. Here, central banks issue digital versions of their currencies for use between banks – a settlement asset, not the retail digital rupee held by individuals – and exchange them on a common platform. Both legs of a currency swap would occur at the same instant or not at all, removing the risk of paying out before the other side pays, which speeds up settlement and reduces the capital banks must set aside against such transactions.

The 2024 BRICS report claims transactions settled this way would yield significant cost savings. Only one such platform runs today – mBridge, built by the BIS with the central banks of China, Thailand, Hong Kong, and the UAE, which the BIS handed to its participants and left in October 2024. Over 95% of its settlement volume is in China's digital yuan, according to People's Bank of China figures reported by Reuters.

The Kazan declaration of BRICS in 2024 agreed to "discuss and study the feasibility" of an independent settlement system called BRICS Clear, but the Rio declaration the following year did not mention it.

What is India's position?

India's own proposal, reported in January, is that members link their CBDCs for trade and tourism payments. Indian officials have been careful to frame the payment systems as a means of cutting transaction costs and speeding up settlement rather than as initiatives to displace the dollar – even as Russian proposals, and those of some Brazilian economists, have gone further, towards alternative financial systems that would reduce dependence on the dollar.

U.S. President Donald Trump, in November 2024, had threatened to impose 100% tariffs on BRICS countries if they moved away from the dollar and a further 10% tariff on countries aligning with vaguely defined "anti-American" BRICS policies during last year's Rio summit. The threats were not carried out. But even though they were not targeted at payment systems, this could perhaps be a reason why Indian officials have framed discussions only as a matter of reducing transaction costs.

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PM Narendra Modi, Brazilian President Luiz Inacio Lula da Silva and South African President Cyril Ramaphosa at the BRICS Summit in Brazil in 2025. PTI

in New Delhi to be held in September, with India as the Chair, is expected to push for mechanisms to facilitate cross-border payments between members, including links between digital payment systems and central bank digital currencies (CBDCs), according to a report

in The Hindu businessLine.

सितंबर में नई दिल्ली में भारत की अध्यक्षता में आयोजित होने वाले 18वें BRICS शिखर सम्मेलन में सदस्य देशों के बीच सीमा-पार भुगतान को सुगम बनाने वाली व्यवस्थाओं को आगे बढ़ाए जाने की संभावना है, जिसमें डिजिटल भुगतान प्रणालियों और केंद्रीय बैंक डिजिटल मुद्राओं (CBDCs) के बीच संपर्क स्थापित करना भी शामिल है, जैसा कि द हिंदू बिज़नेसलाइन की एक रिपोर्ट में बताया गया है।

- Ahead of the summit, **finance ministries** and central bank representatives from BRICS countries met in Jaipur on August 12-13 to discuss **financial cooperation, payments**, and the wider use of national currencies in settling trade between members. शिखर सम्मेलन से पहले, BRICS देशों के वित्त मंत्रालयों और केंद्रीय बैंकों के प्रतिनिधियों ने 12-13 अगस्त को जयपुर में बैठक की, जिसमें वित्तीय सहयोग, भुगतान तथा सदस्य देशों के बीच व्यापार के निपटान में राष्ट्रीय मुद्राओं के व्यापक उपयोग पर चर्चा की गई।

How do current cross-border payments work?

वर्तमान सीमा-पार भुगतान कैसे काम करते हैं?

- Sending money from one country to another requires a chain of transactions. एक देश से दूसरे देश में धन भेजने के लिए लेन-देन की एक श्रृंखला की आवश्यकता होती है।
- Let's say, an importer in Cape Town is buying passenger cars from an exporter in Chennai. मान लीजिए, केपटाउन में एक आयातक चेन्नई के एक निर्यातक से यात्री कारें खरीद रहा है।
- The payment does not travel directly from the South African bank to the Indian one. भुगतान सीधे दक्षिण अफ्रीकी बैंक से भारतीय बैंक तक नहीं जाता है।
- It travels via a series of intermediaries called **correspondent banks** that hold accounts with each other. यह **कोर्रेस्पॉन्डेंट बैंकों** कहे जाने वाले मध्यस्थों की एक श्रृंखला के माध्यम से जाता है, जिनके एक-दूसरे के पास खाते होते हैं।
- Since the South African bank does not hold an account with the Indian one (and vice versa), the payment is routed through a larger international bank that deals with both and is typically headquartered in London or New York. चूंकि दक्षिण अफ्रीकी बैंक का भारतीय बैंक में खाता नहीं होता है और इसके विपरीत भी ऐसा ही है, इसलिए भुगतान एक ऐसे बड़े अंतरराष्ट्रीय बैंक के माध्यम से भेजा जाता है जो दोनों के साथ लेन-देन करता है और जिसका मुख्यालय सामान्यतः लंदन या न्यूयॉर्क में होता है।
- Because very few banks hold both rupees and rand, the payment involves converting rand to dollars and dollars to rupees where, in essence, the **dollar acts like a vehicle currency**, even though no American is involved in the trade. चूंकि बहुत कम बैंकों के पास रुपये और रैंड दोनों होते हैं, इसलिए भुगतान में रैंड को डॉलर में और डॉलर को रुपये में परिवर्तित करना शामिल होता है, जहाँ मूलतः **डॉलर एक वाहन मुद्रा (vehicle currency)** के रूप में कार्य करता है, भले ही इस व्यापार में कोई अमेरिकी पक्ष शामिल न हो।

What is SWIFT?

SWIFT क्या है?

- Now, apart from the money, there are also instructions that travel between the banks. अब, धन के अलावा, बैंकों के बीच निर्देश भी भेजे जाते हैं।
- This is handled by **SWIFT (Society for Worldwide Interbank Financial Telecommunication)**, which is a Belgium-based cooperative and overseen by the National Bank of Belgium along with the G-10 central banks, including the U.S. Federal Reserve. इसे **SWIFT (Society for Worldwide Interbank Financial Telecommunication)** द्वारा संचालित

किया जाता है, जो बेलजियम स्थित एक सहकारी संस्था है और जिसकी निगरानी नेशनल बैंक ऑफ बेलजियम तथा अमेरिकी फेडरल रिज़र्व सहित G-10 केंद्रीय बैंकों द्वारा की जाती है।

- **SWIFT is a messaging network, like a secure post-office.**
SWIFT एक **संदेश-प्रेषण नेटवर्क** है, जो एक सुरक्षित डाकघर की तरह कार्य करता है।
- **It enables institutions to exchange payment instructions through it and settle amounts separately.**
यह संस्थाओं को इसके माध्यम से भुगतान संबंधी निर्देशों का आदान-प्रदान करने और राशियों का अलग से निपटान करने में सक्षम बनाता है।
- It is used directly by more than 11,000 institutions in over 200 countries.
200 से अधिक देशों में 11,000 से अधिक संस्थाएँ इसका प्रत्यक्ष रूप से उपयोग करती हैं।
- Smaller banks reach it indirectly through larger banks that are part of the SWIFT network, which is why it has become crucial and hard to displace.
छोटे बैंक SWIFT नेटवर्क का हिस्सा बनने वाले बड़े बैंकों के माध्यम से अप्रत्यक्ष रूप से इसका उपयोग करते हैं, यही कारण है कि यह अत्यंत महत्वपूर्ण और इसे प्रतिस्थापित करना कठिन हो गया है।

What are the costs involved in each step?

प्रत्येक चरण में शामिल लागतें क्या हैं?

- Every intermediary charges a fee and the currencies are converted twice (rand to dollar and dollar to rupees).
प्रत्येक मध्यस्थ शुल्क लेता है और मुद्राओं को दो बार परिवर्तित किया जाता है—रैंड से डॉलर और डॉलर से रुपये में।
- So the **foreign exchange margins are paid twice.**
इस प्रकार **विदेशी मुद्रा विनिमय मार्जिन** का भुगतान दो बार करना पड़ता है।
- A 2019 BRICS survey of cross-border payment systems, conducted by Brazil, found that Brazilian respondents reported foreign exchange margins of 2.5% with the figure rising to 8.5% for payments in Africa and, in some cases, as high as 20%.
ब्राज़ील द्वारा 2019 में किए गए सीमा-पार भुगतान प्रणालियों के एक BRICS सर्वेक्षण में पाया गया कि ब्राज़ील के उत्तरदाताओं ने **2.5% विदेशी मुद्रा मार्जिन** की सूचना दी, जबकि अफ्रीका में भुगतानों के लिए यह आँकड़ा बढ़कर 8.5% हो गया और कुछ मामलों में 20% तक पहुँच गया।
- While speed of transactions used to be a major issue, SWIFT claims that its **SWIFT Global Payments Innovation** has helped reduce transaction times significantly.
हालाँकि लेन-देन की गति पहले एक प्रमुख समस्या हुआ करती थी, SWIFT का दावा है कि उसके **SWIFT Global Payments Innovation** ने लेन-देन के समय को काफी कम करने में मदद की है।
- Some structural delays remain even as the transaction chain has also become thinner.
लेन-देन की श्रृंखला के अधिक संक्षिप्त हो जाने के बावजूद कुछ संरचनात्मक विलंब अभी भी बने हुए हैं।
- The **Bank for International Settlements (BIS)** found that active correspondent banking relationships fell by 20% between 2011 and 2018 with regional declines varying from 12% to 30% and Latin America being the worst affected.
Bank for International Settlements (BIS) ने पाया कि 2011 और 2018 के बीच सक्रिय कोर्रेस्पॉन्डेंट बैंकिंग संबंधों में 20% की कमी आई, जिसमें क्षेत्रीय गिरावट 12% से 30% के बीच रही और लैटिन अमेरिका सबसे अधिक प्रभावित हुआ।
- The reasons for this decline were largely commercial.
इस गिरावट के कारण मुख्यतः **वाणिज्यिक** थे।
- Payment volumes kept growing during this period, even as they travelled through a smaller network.
इस अवधि के दौरान भुगतान की मात्रा लगातार बढ़ती रही, जबकि वे एक छोटे नेटवर्क के माध्यम से संचालित होते रहे।

Why does BRICS want to change this system?

BRICS इस प्रणाली को क्यों बदलना चाहता है?

- For developing economies, though, payments in a handful of dominant currencies such as the U.S. dollar, the euro and the Japanese yen expose countries to the monetary policies of the countries that issue them.
हालाँकि, विकासशील अर्थव्यवस्थाओं के लिए अमेरिकी डॉलर, यूरो और जापानी येन जैसी कुछ प्रमुख मुद्राओं में भुगतान करने से देश उन देशों की **मौद्रिक नीतियों** के प्रभाव में आ जाते हैं जो इन मुद्राओं को जारी करते हैं।
- The 2024 BRICS report under Russia's chairmanship argued that this part of the financial system is monopolised by a single institution, raising transaction costs.
रूस की अध्यक्षता में जारी 2024 की BRICS रिपोर्ट में तर्क दिया गया कि वित्तीय प्रणाली का यह हिस्सा एकल संस्था के प्रभुत्व में है, जिससे लेन-देन की लागत बढ़ती है।
- Alternatives to the system suffer from the fact that they have to convince a large number of banks and regulators to join before being useful.
इस प्रणाली के विकल्पों की समस्या यह है कि उपयोगी बनने से पहले उन्हें बड़ी संख्या में बैंकों और नियामकों को इसमें शामिल होने के लिए सहमत करना पड़ता है।
- A bank that uses an alternative system to deal with sanctioned entities — several Russian banks were cut off from SWIFT in 2022, following Russia's invasion of Ukraine — also risks sanctions, which deters others from joining.
जो बैंक प्रतिबंधित संस्थाओं के साथ लेन-देन करने के लिए किसी वैकल्पिक प्रणाली का उपयोग करता है—रूस द्वारा यूक्रेन पर आक्रमण के बाद 2022 में कई रूसी बैंकों को SWIFT से अलग कर दिया गया था—उसे भी प्रतिबंधों का जोखिम रहता है, जो अन्य संस्थाओं को इसमें शामिल होने से हतोत्साहित करता है।
- A sanctions-hit Russia has pushed hardest for an alternative and is also the reason why others are wary of joining one.
प्रतिबंधों से प्रभावित रूस ने किसी वैकल्पिक प्रणाली के लिए सबसे अधिक जोर दिया है और यही कारण भी है कि अन्य देश ऐसी किसी प्रणाली में शामिल होने को लेकर सतर्क हैं।

What changes can be envisaged in the BRICS discussions?

BRICS चर्चाओं में किन बदलावों की कल्पना की जा सकती है?

- The idea being explored is a payment system where, instead of payments moving through several correspondent banks with dollar conversions, national payment systems would connect to each other directly.
जिस विचार पर विचार किया जा रहा है, वह ऐसी भुगतान प्रणाली है जिसमें भुगतानों को कई कोर्रेस्पॉन्डेंट बैंकों और डॉलर में रूपांतरण के माध्यम से भेजने के बजाय **राष्ट्रीय भुगतान प्रणालियाँ सीधे एक-दूसरे से जुड़ेंगी**।
- This could be done in pairs as India and Singapore have already done for remittances by linking the former's **Unified Payments Interface (UPI)** and the latter's PayNow systems.
यह दो-दो देशों के बीच किया जा सकता है, जैसा कि भारत और सिंगापुर ने प्रेषण के लिए पहले ही किया है, जहाँ भारत की **Unified Payments Interface (UPI)** और सिंगापुर की PayNow प्रणालियों को जोड़ा गया है।
- But building bilateral systems individually will not scale appropriately.
लेकिन प्रत्येक देश के साथ अलग-अलग द्विपक्षीय प्रणालियाँ बनाना उचित स्तर तक विस्तारित नहीं हो पाएगा।
- An alternative could be via a shared hub that each country joins.
एक विकल्प एक **साझा हब** हो सकता है, जिसमें प्रत्येक देश शामिल हो।
- One such effort is **Project Nexus**, designed by the BIS and handed over to a company set up by six central banks, including India's Reserve Bank of India.
ऐसा ही एक प्रयास **Project Nexus** है, जिसे BIS ने तैयार किया है और छह केंद्रीय बैंकों द्वारा स्थापित एक कंपनी को सौंप दिया गया है, जिसमें भारत का भारतीय रिज़र्व बैंक भी शामिल है।

- It is set to go live only in 2027.
इसके केवल 2027 में शुरू होने की संभावना है।
- Notably, it is not a BRICS initiative.
महत्वपूर्ण रूप से, यह BRICS की पहल नहीं है।
- The BRICS discussions would extend this idea to the use of **central bank digital currencies**.
BRICS की चर्चाएँ इस विचार को **केंद्रीय बैंक डिजिटल मुद्राओं** के उपयोग तक विस्तारित करेंगी।
- Here, central banks issue digital versions of their currencies for use between banks — a settlement asset, not the retail digital rupee held by individuals — and exchange them on a common platform.
इसमें केंद्रीय बैंक अपनी मुद्राओं के डिजिटल संस्करण जारी करते हैं, जिनका उपयोग बैंकों के बीच किया जाता है—यह एक **निपटान परिसंपत्ति** होती है, न कि व्यक्तियों के पास रखी जाने वाली खुदरा डिजिटल रुपया मुद्रा— और इन्हें एक साझा मंच पर विनिमय किया जाता है।
- Both legs of a currency swap would occur at the same instant or not at all, removing the risk of paying out before the other side pays, which speeds up settlement and reduces the capital banks must set aside against such transactions.
मुद्रा विनिमय के दोनों पक्ष एक ही समय पर संपन्न होंगे या बिल्कुल नहीं होंगे, जिससे दूसरे पक्ष के भुगतान से पहले भुगतान कर देने का जोखिम समाप्त हो जाएगा; इससे **निपटान की गति बढ़ेगी** और ऐसे लेन-देन के लिए बैंकों को अलग रखनी पड़ने वाली पूंजी भी कम होगी।
- The 2024 BRICS report claims transactions settled this way would yield significant cost savings.
2024 की BRICS रिपोर्ट का दावा है कि इस तरीके से निपटाए गए लेन-देन से **लागत में महत्वपूर्ण बचत** होगी।
- Only one such platform runs today — **mBridge**, built by the BIS with the central banks of China, Thailand, Hong Kong, and the UAE, which the BIS handed to its participants and left in October 2024.
आज ऐसी केवल एक ही प्रणाली संचालित है—**mBridge**, जिसे BIS ने चीन, थाईलैंड, हांगकांग और UAE के केंद्रीय बैंकों के साथ मिलकर बनाया था, जिसे BIS ने अक्टूबर 2024 में उसके प्रतिभागियों को सौंप दिया और स्वयं इससे अलग हो गया।
- Over 95% of its settlement volume is in China's digital yuan, according to People's Bank of China figures reported by Reuters.
रॉयटर्स द्वारा रिपोर्ट किए गए People's Bank of China के आँकड़ों के अनुसार, इसके **95% से अधिक निपटान का वॉल्यूम चीन की डिजिटल युआन** में है।
- The Kazan declaration of BRICS in 2024 agreed to “discuss and study the feasibility” of an independent settlement system called **BRICS Clear**, but the Rio declaration the following year did not mention it.
2024 की **कज़ान घोषणा** में BRICS ने **BRICS Clear** नामक एक स्वतंत्र निपटान प्रणाली की “चर्चा और व्यवहार्यता का अध्ययन” करने पर सहमति व्यक्त की थी, लेकिन अगले वर्ष की रियो घोषणा में इसका उल्लेख नहीं किया गया।

What is India's position?

भारत का रुख क्या है?

- India's own proposal, reported in January, is that members link their **CBDCs** for trade and tourism payments.
जनवरी में रिपोर्ट किए गए भारत के अपने प्रस्ताव के अनुसार, सदस्य देशों को व्यापार और पर्यटन संबंधी भुगतानों के लिए अपनी **CBDCs** को आपस में जोड़ना चाहिए।
- Indian officials have been careful to frame the payment systems as a means of cutting transaction costs and speeding up settlement rather than as initiatives to displace the dollar — even as Russian proposals, and those of some Brazilian economists, have gone further, towards alternative financial systems that would reduce dependence on the dollar.



भारतीय अधिकारियों ने भुगतान प्रणालियों को डॉलर को विस्थापित करने की पहल के बजाय **लेन-देन की लागत कम करने और निपटान की गति बढ़ाने के साधन** के रूप में प्रस्तुत करने में सावधानी बरती है—हालाँकि रूसी प्रस्ताव और कुछ ब्राज़ीलियाई अर्थशास्त्रियों के प्रस्ताव इससे आगे बढ़कर ऐसे वैकल्पिक वित्तीय तंत्रों की दिशा में हैं, जो डॉलर पर निर्भरता को कम करेंगे।

- U.S. President Donald Trump, in November 2024, had threatened to impose 100% tariffs on BRICS countries if they moved away from the dollar and a further 10% tariff on countries aligning with vaguely defined “anti-American” BRICS policies during last year’s Rio summit. अमेरिकी राष्ट्रपति डोनाल्ड ट्रम्प ने नवंबर 2024 में धमकी दी थी कि यदि BRICS देश डॉलर से दूर जाते हैं, तो उन पर **100% टैरिफ** लगाया जाएगा और पिछले वर्ष के रियो शिखर सम्मेलन के दौरान अस्पष्ट रूप से परिभाषित “अमेरिका-विरोधी” BRICS नीतियों के साथ जुड़ने वाले देशों पर अतिरिक्त **10% टैरिफ** लगाया जाएगा।
- The threats were not carried out. इन धमकियों को लागू नहीं किया गया।
- But even though they were not targeted at payment systems, this could perhaps be a reason why Indian officials have framed discussions only as a matter of reducing transaction costs. लेकिन भले ही ये धमकियाँ भुगतान प्रणालियों को लक्षित करके नहीं दी गई थीं, फिर भी संभवतः यही एक कारण हो सकता है कि भारतीय अधिकारियों ने चर्चाओं को केवल **लेन-देन की लागत कम करने** के विषय के रूप में प्रस्तुत किया है।

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C. Rangarajan flags fewer regional rural banks as ‘a step in the wrong direction’

GS III: Economy
Balasubramanyam C.P.
CHENNAI

Former Reserve Bank of India Governor C. Rangarajan has criticised the consolidation of Regional Rural Banks (RRBs), saying the move has undermined their local and regional character and could eventually lead to their merger with universal banks. “What has happened to Regional Rural Banks?” Mr. Rangarajan asked while speaking at an event in Chennai marking the 10th

anniversary of Equitas Small Finance Bank.

He said RRBs had now been merged, leaving one RRB per State. In one case, he said, the parent bank had also absorbed the RRB. “To me, this is a step in the wrong direction,” he said.

“It essentially loses the local and regional character of these banks, and ultimately they may get merged with the universal banks as well.”

RRBs were originally set up with the idea that their

local character would help distribute credit more evenly, Mr. Rangarajan said. He also recalled that the evolution of credit provision to vulnerable and weaker sections had involved several institutional initiatives, including bank nationalisation, priority-sector credit, RRBs, Local Area Banks, self-help groups and, subsequently, small finance banks.

According to a July 2025 written reply in the Lok Sabha by Finance Minister Nirmala Sitharaman, the

government has progressively consolidated Regional Rural Banks (RRBs) since 2005 to improve their operational viability and take advantage of economies of scale. In the first phase of amalgamation, between 2005 and 2010, the number of RRBs was reduced from 196 to 82, while subsequent phases brought the number down further. Under the latest ‘One State-One RRB’ phase, the number was reduced from 43 to 28, effective May 1, 2025.

Mr. Rangarajan also

called on the Reserve Bank of India to consider ways to incentivise the setting up of small finance banks, saying their current numbers would not be sufficient to meet unmet credit needs.

“There is something we must do about SFBs. I believe they will have a role to play,” he said.

He said there were currently only 11 small finance banks, adding that this would not be enough to meet the unmet credit needs of the sector.

He said that small fi-

nance banks today have an obligation to fulfil the same set of conditions as universal banks. Unless prospective promoters were motivated by other considerations, he said, there would be little incentive to set up such banks.

“So, I would appeal to the Reserve Bank of India to look at how to incentivise the setting up of small finance banks,” he said.

Mr. Rangarajan said the aspiration of SFBs to eventually become universal banks was not a problem.

“There is nothing wrong with that. I am not complaining,” he said.

He added that the performance of SFBs in their mandated areas would count and said they had done extremely well in the areas in which they were required to work.

The former chairman of the Prime Minister’s Economic Advisory Council said India’s response to gaps in credit delivery had repeatedly been to create new institutions. “Whenever we felt that something

was not happening, we said, ‘We will create a new institution,’” he said.

But he cautioned that simply creating a new institutional structure would not necessarily solve the underlying problem.

“Creating an institution by itself is not the answer, because institutions can come and still the problems will continue.” He said the record of SFBs showed the spirit with which management took on the task was important.

08S9. C. Rangarajan flags fewer regional rural banks as ‘a step in the wrong direction’

सी. रंगराजन ने क्षेत्रीय ग्रामीण बैंकों की घटती संख्या को ‘गलत दिशा में उठाया गया कदम’ बताया

- Former Reserve Bank of India Governor C. Rangarajan has criticised the consolidation of Regional Rural Banks (RRBs), saying the move has undermined their local and regional character and could eventually lead to their merger with universal banks. भारतीय रिज़र्व बैंक के पूर्व गवर्नर सी. रंगराजन ने क्षेत्रीय ग्रामीण बैंकों (RRBs) के एकीकरण की आलोचना करते हुए कहा है कि इस कदम ने उनके स्थानीय और क्षेत्रीय स्वरूप को कमजोर कर दिया है और अंततः उनका विलय सार्वभौमिक बैंकों के साथ हो सकता है।

- “What has happened to **Regional Rural Banks**?” Mr. Rangarajan asked while speaking at an event in Chennai marking the 10th anniversary of Equitas Small Finance Bank.
“क्षेत्रीय ग्रामीण बैंकों का क्या हुआ है?” श्री रंगराजन ने चेन्नई में इक्विटास स्मॉल फाइनेंस बैंक की 10वीं वर्षगांठ के अवसर पर आयोजित एक कार्यक्रम में बोलते हुए पूछा।
- He said RRBs had now been merged, leaving one RRB per State.
उन्होंने कहा कि अब RRBs का विलय कर दिया गया है और प्रत्येक राज्य में केवल एक RRB रह गया है।
- In one case, he said, the parent bank had also absorbed the RRB.
उन्होंने कहा कि एक मामले में मूल बैंक ने स्वयं RRB को भी अपने में समाहित कर लिया है।
- “To me, this is a step in the wrong direction,” he said.
उन्होंने कहा, “मेरे लिए यह गलत दिशा में उठाया गया कदम है।”
- “It essentially loses the local and regional character of these banks, and ultimately they may get merged with the universal banks as well.”
“इससे मूलतः इन बैंकों का स्थानीय और क्षेत्रीय स्वरूप समाप्त हो जाता है और अंततः इनका विलय सार्वभौमिक बैंकों के साथ भी हो सकता है।”
- RRBs were originally set up with the idea that their local character would help distribute credit more evenly, Mr. Rangarajan said.
श्री रंगराजन ने कहा कि RRBs की स्थापना मूल रूप से इस विचार के साथ की गई थी कि उनका स्थानीय स्वरूप ऋण को अधिक समान रूप से वितरित करने में सहायता करेगा।
- He also recalled that the evolution of credit provision to vulnerable and weaker sections had involved several institutional initiatives, including bank nationalisation, priority sector credit, RRBs, Local Area Banks, self-help groups and, subsequently, small finance banks.
उन्होंने यह भी स्मरण किया कि कमजोर और वंचित वर्गों को ऋण उपलब्ध कराने की व्यवस्था के विकास में कई संस्थागत पहल शामिल रही हैं, जिनमें बैंकों का राष्ट्रीयकरण, प्राथमिकता क्षेत्र ऋण, RRBs, स्थानीय क्षेत्र बैंक, स्वयं सहायता समूह और बाद में स्मॉल फाइनेंस बैंक शामिल हैं।
- According to a July 2025 written reply in the Lok Sabha by Finance Minister Nirmala Sitharaman, the government has progressively consolidated **Regional Rural Banks (RRBs) since 2005** to improve their operational viability and take advantage of economies of scale.
वित्त मंत्री निर्मला सीतारमण द्वारा जुलाई 2025 में लोकसभा में दिए गए एक लिखित उत्तर के अनुसार, सरकार ने परिचालन क्षमता में सुधार और बड़े पैमाने की अर्थव्यवस्थाओं का लाभ उठाने के लिए 2005 से क्षेत्रीय ग्रामीण बैंकों (RRBs) का क्रमिक रूप से एकीकरण किया है।
- **In the first phase of amalgamation, between 2005 and 2010, the number of RRBs was reduced from 196 to 82**, while subsequent phases brought the number down further.
विलय के पहले चरण में, 2005 से 2010 के बीच, RRBs की संख्या 196 से घटाकर 82 कर दी गई, जबकि बाद के चरणों में यह संख्या और कम की गई।
- Under the latest ‘One State One RRB’ phase, the number was reduced from 43 to 28, effective May 1, 2025.
नवीनतम ‘वन स्टेट वन RRB’ चरण के तहत, 1 मई 2025 से प्रभावी रूप से इनकी संख्या 43 से घटाकर 28 कर दी गई।
- Mr. Rangarajan also called on the Reserve Bank of India to consider ways to incentivise the setting up of small finance banks, saying their current numbers would not be sufficient to meet unmet credit needs.
श्री रंगराजन ने भारतीय रिज़र्व बैंक से स्मॉल फाइनेंस बैंकों की स्थापना को प्रोत्साहित करने के तरीकों पर विचार करने का भी आग्रह किया और कहा कि उनकी वर्तमान संख्या अपूर्ण ऋण आवश्यकताओं को पूरा करने के लिए पर्याप्त नहीं होगी।
- “There is something we must do about SFBs. I believe they will have a role to play,” he said.
उन्होंने कहा, “हमें SFBs के संबंध में कुछ करना होगा। मेरा मानना है कि उनकी भूमिका महत्वपूर्ण होगी।”
- He said there were currently only 11 small finance banks, adding that this would not be enough to meet the unmet credit needs of the sector.

उन्होंने कहा कि वर्तमान में केवल 11 स्मॉल फाइनेंस बैंक हैं और यह संख्या क्षेत्र की अपूर्ण ऋण आवश्यकताओं को पूरा करने के लिए पर्याप्त नहीं होगी।

- He said that small finance banks today have an obligation to fulfil the same set of conditions as universal banks.
उन्होंने कहा कि आज स्मॉल फाइनेंस बैंकों पर सार्वभौमिक बैंकों जैसी ही शर्तों को पूरा करने का दायित्व है।
- Unless prospective promoters were motivated by other considerations, he said, there would be little incentive to set up such banks.
उन्होंने कहा कि जब तक संभावित प्रवर्तकों को अन्य कारणों से प्रेरणा नहीं मिलेगी, तब तक ऐसे बैंकों की स्थापना के लिए बहुत कम प्रोत्साहन होगा।
- “So, I would appeal to the Reserve Bank of India to look at how to incentivise the setting up of small finance banks,” he said.
उन्होंने कहा, “इसलिए मैं भारतीय रिज़र्व बैंक से आग्रह करूंगा कि वह स्मॉल फाइनेंस बैंकों की स्थापना को प्रोत्साहित करने के तरीकों पर विचार करे।”
- Mr. Rangarajan said the aspiration of SFBs to eventually become universal banks was not a problem.
श्री रंगराजन ने कहा कि SFBs की अंततः सार्वभौमिक बैंक बनने की आकांक्षा कोई समस्या नहीं है।
- “There is nothing wrong with that. I am not complaining,” he said.
उन्होंने कहा, “इसमें कुछ भी गलत नहीं है। मैं इसकी शिकायत नहीं कर रहा हूँ।”
- He added that the performance of SFBs in their mandated areas would count and said they had done extremely well in the areas in which they were required to work.
उन्होंने कहा कि निर्धारित क्षेत्रों में SFBs का प्रदर्शन महत्वपूर्ण होगा और कहा कि जिन क्षेत्रों में उन्हें कार्य करना अनिवार्य था, उनमें उन्होंने अत्यंत अच्छा प्रदर्शन किया है।
- The former chairman of the Prime Minister’s Economic Advisory Council said India’s response to gaps in credit delivery had repeatedly been to create new institutions.
प्रधानमंत्री की आर्थिक सलाहकार परिषद के पूर्व अध्यक्ष ने कहा कि ऋण वितरण में मौजूद कमियों के प्रति भारत की प्रतिक्रिया बार-बार नई संस्थाओं का निर्माण करना रही है।
- “Whenever we felt that something was not happening, we said, ‘We will create a new institution,’” he said.
उन्होंने कहा, “जब भी हमें लगा कि कुछ ठीक से नहीं हो रहा है, हमने कहा, ‘हम एक नई संस्था बनाएंगे।’”
- But he cautioned that simply creating a new institutional structure would not necessarily solve the underlying problem.
लेकिन उन्होंने चेतावनी दी कि केवल एक नई संस्थागत संरचना का निर्माण करना आवश्यक रूप से मूल समस्या का समाधान नहीं करेगा।
- “Creating an institution by itself is not the answer, because institutions can come and still the problems will continue.”
“केवल किसी संस्था का निर्माण समाधान नहीं है, क्योंकि संस्थाएँ बन सकती हैं और फिर भी समस्याएँ बनी रह सकती हैं।”
- He said the record of SFBs showed the spirit with which management took on the task was important.
उन्होंने कहा कि SFBs का अनुभव दर्शाता है कि प्रबंधन ने जिस भावना और प्रतिबद्धता के साथ कार्य को अपनाया, वह महत्वपूर्ण है।

GS Paper III: Science and Technology		08 September 2026
TOPICS COVERED		
08S9	Ground control ग्राउंड कंट्रोल	



GS III: S&T

Ground control

ISRO must focus on space technology as a tool for development

The irony was evident: on the day the Indian Space Research Organisation (ISRO) had its greatest success of the year — the launch of its first geosynchronous imaging satellite (EOS-05) on a temperamental GSLV — its employee organisations demanded clarity on its long-term plans. But this grievance was long in the making. Since the Indian Space Policy of April 2023, the message has been clear that ISRO would, one day in the unspecified future, stop making commercial satellites and launch rockets. Clearly inspired by NASA, it expects to focus on ambitious exploratory missions and, literally, moonshots. Why would a space agency ramping up space missions upset a section of employees? This is not the paradox it presents. The letter, co-signed by nine employee associations, and addressed to the chairman, seeks clarity on staff strength, recruitment and the outsourcing of core functions. ISRO says that it will “not be privatised or reduced”; IN-SPACe, set up to facilitate private participation, says the agency will “not be diminished”, only that the industry’s role must grow. Both are silent on the core concern — potential job losses. This brings up an underlying tension that ISRO must deal with: does its vision of India’s space sector align with its founding principles, of not being enamoured of space races and being laser-focused on space technology as a tool for social development? Or is the image of power, where India is one of a handful of space-faring countries with a mushrooming of ‘space startups’, now the bedrock of that vision?

With a budget 16 times the Department of Space’s — \$24.4 billion against ₹13,705 crore — NASA too has scaled back since the 1960s: from 0.7% of American GDP in 1966 to 0.1% now, and from 36,000 civil servants at Apollo’s peak to about 14,000 today. Unlike NASA, which in its early years designed and made every nut and bolt, ISRO has always had a manufacturing relationship with the private sector (Walchandnagar, L&T). What is different is that the buzz is not about established companies building on experience but new entrants with fleeting foreign capital, most interested in satellite data as a service. No sector can hope to be static; survival can mean significant changes to how it operates. There is yet no serious reckoning with the might of China’s space programme. If India’s space sector in 2035 is to be known as a source of export earnings, a nucleus of value-added services that brings in jobs and absorbs skilled labour, then hard choices taken today may be worth it. But jumping onto a bandwagon of space — as fuel for the science fiction fantasy of billionaires and colonial notions of conquest, to align with some misplaced notion of an ‘exclusive’ club — is foolhardy. ISRO must have a transparent policy that spells this out.

लिए स्थापित किया गया है, का कहना है कि संगठन को “कमतर नहीं किया जाएगा”, केवल उद्योग की भूमिका बढ़नी चाहिए।

- Both are silent on the core concern — potential **job losses**. दोनों मुख्य चिंता — संभावित **रोजगार हानि** — पर मौन हैं।
- This brings up an underlying tension that ISRO must deal with: does its vision of India’s space sector align with its founding principles, of not being enamoured of space races and being laser-focused on space technology as a tool for social development?

08S9. Ground control

ग्राउंड कंट्रोल

The irony was evident: on the day the **Indian Space Research Organisation (ISRO)** had its greatest success of the year — the launch of its **first geosynchronous imaging satellite (EOS-05) on a temperamental GSLV** — its employee organisations demanded clarity on its long-term plans.

विडंबना स्पष्ट थी: जिस दिन **भारतीय अंतरिक्ष अनुसंधान संगठन (ISRO)** ने वर्ष की अपनी सबसे बड़ी सफलता हासिल की — एक अस्थिर GSLV पर अपने पहले **भू-समकालिक इमेजिंग उपग्रह (EOS-05)** का प्रक्षेपण — उसी दिन उसके कर्मचारी संगठनों ने उसकी दीर्घकालिक योजनाओं पर स्पष्टता की मांग की।

But this grievance was long in the making.

लेकिन यह शिकायत लंबे समय से आकार ले रही थी।

Since the **Indian Space Policy of April 2023**, the message has been clear that ISRO would, one day in the unspecified future, stop making commercial satellites and launch rockets.

अप्रैल 2023 की भारतीय अंतरिक्ष नीति के बाद से यह संदेश स्पष्ट है कि ISRO किसी अनिर्दिष्ट भविष्य में एक दिन वाणिज्यिक उपग्रहों का निर्माण और रॉकेटों का प्रक्षेपण बंद कर देगा।

Clearly inspired by NASA, it expects to focus on ambitious exploratory missions and, literally, moonshots.

स्पष्ट रूप से **NASA से प्रेरित**, वह महत्वाकांक्षी अन्वेषण अभियानों और, शाब्दिक रूप से, चंद्र अभियानों पर ध्यान केंद्रित करने की अपेक्षा करता है।

Why would a space agency ramping up space missions upset a section of employees?

अंतरिक्ष अभियानों में तेजी ला रहा कोई अंतरिक्ष संगठन कर्मचारियों के एक वर्ग को क्यों परेशान करेगा?

This is not the paradox it presents.

यह वैसा विरोधाभास नहीं है जैसा यह प्रतीत होता है।

The letter, co-signed by nine employee associations, and addressed to the chairman, seeks clarity on **staff strength, recruitment and the outsourcing of core functions**.

नौ कर्मचारी संगठनों द्वारा सह-हस्ताक्षरित और अध्यक्ष को संबोधित पत्र में **कर्मचारी संख्या, भर्ती और मुख्य कार्यों की आउटसोर्सिंग** पर स्पष्टता की मांग की गई है।

ISRO says that it will “not be privatised or reduced”; **IN-SPACe**, set up to facilitate private participation, says the agency will “not be diminished”, only that the industry’s role must grow.

ISRO का कहना है कि उसका “न तो निजीकरण किया जाएगा और न ही उसका आकार घटाया जाएगा”; **IN-SPACe**, जिसे निजी भागीदारी को सुगम बनाने के

यह एक अंतर्निहित तनाव को सामने लाता है जिससे ISRO को निपटना होगा: क्या भारत के अंतरिक्ष क्षेत्र के बारे में उसका दृष्टिकोण उसके **स्थापना सिद्धांतों** के अनुरूप है, जिनमें अंतरिक्ष दौड़ से प्रभावित न होना और सामाजिक विकास के साधन के रूप में अंतरिक्ष प्रौद्योगिकी पर पूर्ण ध्यान केंद्रित करना शामिल था?

- Or is the image of power, where India is one of a handful of space-faring countries with a mushrooming of 'space startups', now the bedrock of that vision?
या क्या अब उस दृष्टिकोण का आधार **शक्ति की छवि** है, जिसमें भारत तेजी से बढ़ते 'स्पेस स्टार्टअप्स' के साथ अंतरिक्ष में संक्षम देशों के एक छोटे समूह में शामिल है?
- With a budget 16 times the Department of Space's — \$24.4 billion against ₹13,705 crore — NASA too has scaled back since the 1960s: from 0.7% of American GDP in 1966 to 0.1% now, and from 36,000 civil servants at Apollo's peak to about 14,000 today.
अंतरिक्ष विभाग के बजट से 16 गुना अधिक बजट — ₹13,705 करोड़ की तुलना में \$24.4 बिलियन — होने के बावजूद, NASA ने भी 1960 के दशक के बाद अपने विस्तार को कम किया है: 1966 में अमेरिकी GDP के 0.7% से घटकर अब 0.1% और Apollo अभियान के चरम पर 36,000 सरकारी कर्मचारियों से घटकर आज लगभग 14,000।
- Unlike NASA, which in its early years designed and made every nut and bolt, ISRO has always had a **manufacturing relationship with the private sector** (Walchandnagar, L&T). NASA के विपरीत, जिसने अपने शुरुआती वर्षों में हर छोटे-बड़े पुर्जे को स्वयं डिजाइन और निर्मित किया, ISRO का हमेशा से **निजी क्षेत्र के साथ विनिर्माण संबंध** रहा है (Walchandnagar, L&T)।
- What is different is that the buzz is not about established companies building on experience but new entrants with fleeting foreign capital, most interested in satellite data as a service. अंतर यह है कि चर्चा अब अनुभव के आधार पर आगे बढ़ने वाली स्थापित कंपनियों के बारे में नहीं, बल्कि **क्षणिक विदेशी पूंजी** के साथ आने वाले नए प्रवेशकर्ताओं के बारे में है, जिनकी मुख्य रुचि सेवा के रूप में उपग्रह डेटा उपलब्ध कराने में है।
- No sector can hope to be static; survival can mean significant changes to how it operates. कोई भी क्षेत्र स्थिर रहने की उम्मीद नहीं कर सकता; अस्तित्व बनाए रखने के लिए उसके संचालन के तरीके में **महत्वपूर्ण बदलाव** आवश्यक हो सकते हैं।
- There is yet no serious reckoning with the might of **China's space programme**. अभी तक **चीन के अंतरिक्ष कार्यक्रम की शक्ति** का कोई गंभीर आकलन नहीं किया गया है।
- If India's space sector in 2035 is to be known as a source of export earnings, a nucleus of value-added services that brings in jobs and absorbs skilled labour, then hard choices taken today may be worth it.
यदि 2035 में भारत का अंतरिक्ष क्षेत्र **निर्यात आय के स्रोत**, रोजगार सृजित करने और कुशल श्रम को समाहित करने वाली **मूल्यवर्धित सेवाओं के केंद्र** के रूप में जाना जाना है, तो आज लिए गए कठिन निर्णय सार्थक हो सकते हैं।
- But jumping onto a bandwagon of space — as fuel for the science fiction fantasy of billionaires and colonial notions of conquest, to align with some misplaced notion of an 'exclusive' club — is foolhardy.
लेकिन अंतरिक्ष को अरबपतियों की **विज्ञान-कथा जैसी कल्पनाओं** और विजय की औपनिवेशिक धारणाओं के ईंधन के रूप में देखते हुए, किसी गलत 'विशिष्ट' क्लब की अवधारणा के साथ तालमेल बिठाने के लिए उसके पीछे चल पड़ना **मूर्खतापूर्ण** है।
- ISRO must have a **transparent policy** that spells this out.
ISRO के पास एक **पारदर्शी नीति** होनी चाहिए जो इसे स्पष्ट रूप से निर्धारित करे।

GS Paper III: Environment	08 September 2026
TOPICS COVERED	
08S9 India can cut steel emissions before coal plants lock them in	
भारत को कोयला-आधारित संयंत्रों द्वारा उन्हें स्थायी रूप से बढ़ाने से पहले इस्पात उत्सर्जन में कटौती करनी चाहिए	
08S9 Fear revisits residents of Western Ghats	
पश्चिमी घाट के निवासियों में फिर लौटा भय	

India can cut steel emissions before coal plants lock them in

India's green steel journey is still nascent but recent developments, policies have indicated that this hard-to-abate sunrise industry is rising up to the net-zero challenge; balancing growing demand with climate goals remains formidable, however, with a lot riding on the availability of green hydrogen

Neelima Vallangi

A slew of announcements over the last few months from the Indian government have placed steel sector decarbonisation high on the agenda of the country's steelmakers, including a ₹5,000-crore scheme announced last year to accelerate steel sector decarbonisation in the country that is set to launch in the coming months.

India's steelmaking emissions are among the highest in the world, roughly 32% higher than the global average, and account for nearly 12% of the country's total greenhouse gas emissions. Driven by strong demand from infrastructure development, construction, and automotive manufacturing, India's steel production in FY 2025-26 was the second-highest in the world, at around 160 million tonnes, behind only China.

However, steel is a notoriously hard-to-abate industry, and India has its own set of challenges in bringing steelmaking emissions down to zero.

Carbon-intensive method

The government's ongoing National Mission on Green Steel aims to lower steelmaking emissions intensity from the current 2,552.65 down to 2.2 tonnes of carbon dioxide-equivalent (tCO₂e) per tonne of crude steel by 2029-30. A certification scheme it launched under the Mission in 2024 said any steel manufactured with an emissions intensity of less than 2.2 tCO₂e will be considered "green" and the greenest steel still have an intensity of up to 1.6 tCO₂e. Globally, the average emissions from steelmaking hover around 1.85 tCO₂e, making India's greenest steel still highly carbon-intensive.

"India is a developing economy, and we do not have much scrap available. If we have old steel available, we can recycle that scrap to produce new steel, which reduces our costs and emissions associated with reducing iron ore," Anubha Aggarwal, an associate at the Centre for Research on Energy and Clean Air, an independent research organisation, said.

The traditional way to make steel involves burning coal to provide intense heat in a blast furnace, where iron ore is smelted into liquid form using coking coal to strip oxygen. The carbon-rich liquid is then treated with pure oxygen at high speed in a basic oxygen furnace to convert it into high-quality steel by burning away all the impurities. This method, called BF-BOF (blast furnace-basic oxygen furnace), is widely used worldwide, and it is a highly carbon-intensive.

Reducing emissions to produce green steel will involve skipping the first step entirely, when possible, by reusing steel scrap to produce new steel and replacing coal-powered blast furnaces with electric arc furnaces (EAFs), which use electricity to produce steel from scrap, or direct reduced iron (DRI). Steel with a near-zero carbon footprint (excluding scope 3 emissions) could also use green hydrogen instead of natural gas to reduce iron ore and be powered by clean electricity generated from renewable sources.

However, 70-80% of global steelmaking still uses BF-BOF, according to a Nature Reviews Clean Technology analysis. The remaining uses the EAF method, which has less than half the emissions intensity of BF-BOF steel.

'Just a redirection'

In India, the steel industry is relatively more heterogeneous: as per an India Steel Association report, 45% of total crude steel is produced at BF-BOF plants, 22% from EAF units, and 33% from electric induction furnaces (which use electromagnetic fields to process small batches of scrap or DRI) and are known to be energy-efficient. Given the growing demand for steel and several planned steel plants, BF-BOF capacity is projected to increase to 56% by 2030.

In these circumstances, India essentially has a large window of opportunity to become one of the biggest players in green steel and iron production "If India decides to go the extra mile and invest in greener pathways rather than in coal-based steel, Clara Bachorz, a researcher working on steel sector decarbonisation at the Potsdam Institute for Climate Impact Research, Germany, and lead author of a recent paper investigating pathways to avert future emissions from steel industry through strategic green investments, said.

"And this [greener pathway] also has high potential for emission reductions compared to the cost of reducing those



The traditional way to make steel involves burning coal to provide intense heat in a blast furnace, where iron ore is smelted into liquid form using coking coal to strip oxygen. Representative image. <https://www.reuters.com>

emissions later, mostly using bioenergy with carbon capture and storage or carbon dioxide removals," she added.

According to the paper, published in *Nature Climate Change*, avoiding new BF-BOFs and not relying young furnaces that are due for one, and diverting the investments to building EAFs, could almost halve global committed steel emissions.

"We find that since the majority of these BOF plants in India have not broken ground, you could redirect investments already towards DRI-EAF, and this would not require additional investments. It would just be a redirection," Dr. Bachorz said.

India's steel plants are indeed headed for refining blast furnaces, a capital-intensive but essential maintenance task done every two decades that can extend a plant's lifetime by another 15-20 years – but while locking in coal-based steel production and high carbon emissions for that time. More than 41 million tonnes per annum of blast furnace capacity is due for refining before 2030, according to an analysis by Recyclimate, an independent research body examining India's decarbonisation efforts in hard-to-abate sectors.

Switching to hydrogen

In their study, Bachorz et al. modelled two global steel sector transition pathways aligned with 1.5 degree Celsius of warming by the end of the century, with overshoot of up to 1.7 degree Celsius. They found China and India dominate the dynamics of the fast-transition scenario, driven by their near-term BF-BOF investments that far exceed those of other regions.

In the slow-transition scenario, young blast furnaces are retired and announced BF-BOF plants are developed as planned, locking in emissions for decades and relying significantly more on currently nascent carbon dioxide removal



An old electric arc furnace pouring out steel into a small ladle car. The transformer vault can be seen at the right side. <https://www.reuters.com>

technologies in future, in addition to deep emission cuts in other sectors to compensate for steel sector emissions.

In effect, the team's analysis showed early investment shifts – particularly in rapidly growing economies such as India – can substantially reduce future emissions at comparably low costs, making early action in steel a high-leverage climate mitigation opportunity, as in the fast transition scenario.

"Today, it is the most mature green steelmaking technology that you operate, either with natural gas, which still has emissions of around 1.2 tCO₂e per tonne of steel or with green hydrogen, which is then almost zero emissions," Dr. Bachorz said.

According to the team's model, India first operates these DRI-EAF plants primarily with natural gas until 2040-2045, after which it switches to hydrogen as green hydrogen becomes sufficiently cost-competitive. "If you wanted to operate such a plant with green hydrogen today, my feeling is that this would be a lot more expensive," she continued.

In conclusion, the researchers suggested steel is less a 'hard-to-abate' sector than a sector facing a 'hard-to-abate barrier' that can be overcome at relatively moderate costs through timely investment decisions.

Defining 'green steel'

"When you compare a sector like steel with aviation, it is relatively much easier to abate because the technology is already there, even though it is more expensive," Dr. Bachorz said.

"So you need to pay the green premium and basically go over this investment barrier. But once you commit, it is one of the easiest hard-to-abate sectors."

"If we invest in EAF now, it would be much easier for us to make it cleaner later

rather than investing in BF-BOF now and it becoming a stranded property later," Ms. Aggarwal said. "Because we have already seen this with thermal power plants, where it becomes really difficult to close them down, as a lot of investment has gone into them, and you want a return on your investments. We do not want to repeat the same story with steel."

However, she warned that natural gas-based EAFs also carry the risks of fuel shortages, import dependence, geopolitical shocks, and stranded natural gas infrastructure (when used as a bridge fuel to reduce steel emissions).

ArcelorMittal Nippon Steel India became the first integrated steel producer to receive green steel certification in February this year. According to government data, 89 steel units had been awarded the same certification as of March 31, covering a production volume of 12.14 million tonnes.

"You may have your doubts about whether [India's green steel] is really green, and the brackets for green steel certification are too large not to be very effective, but then at the end of the day, we have taken that initiative of defining what 'green steel' is, unlike anywhere else in the world," Ms. Aggarwal added. "What we have not done is create the kind of market where there is also demand for green steel."

'Future-proof pathway'

This January, the European Union's Carbon Border Adjustment Mechanism came into effect, imposing steep penalties on carbon-intensive imports, including India's high-emission steel, which is exported to several European countries.

In response, India has been seeking alternative markets and boosting domestic consumption, while the market and compliance obligations may be forcing the steel industry to rethink investment decisions and adopt steel production technologies with lower emissions intensity.

In March, the Union Ministry of New and Renewable Energy funded three pilot green hydrogen projects totalling more than Rs. 400 crore to pursue innovation and validate the technical feasibility of using 100% green hydrogen in furnaces and other stages for low-carbon steel production. Last year, JSW Energy commissioned its first, and India's largest, commercial-scale green hydrogen plant in Karnataka's Vijayanagar to supply 100% green hydrogen to adjoining JSW Steel's DRI unit.

ArcelorMittal Nippon Steel India, in the meantime, is promoting its green steel to buyers interested in slashing their scope 3 emissions.

India's green steel journey is still nascent but recent developments and policies have indicated that this hard-to-abate sunrise industry is rising up to the net-zero challenge. However, balancing growing demand with climate goals remains a formidable challenge for now, with a lot riding on green hydrogen availability and affordability.

Neelima Vallangi is an independent journalist and filmmaker covering climate change in the Himalayan region and South Asia. me.neelima@gmail.com

08S9. India can cut steel emissions before coal plants lock them in

भारत को कोयला-आधारित संयंत्रों द्वारा उन्हें स्थायी रूप से बढ़ाने से पहले इस्पात उत्सर्जन में कटौती करनी चाहिए

- A slew of announcements over the last few months from the Indian government have placed **steel sector decarbonisation** high on the agenda of the country's steelmakers, including a ₹5,000-crore scheme announced last year to accelerate steel sector decarbonisation in the country that is set to launch in the coming months.

पिछले कुछ महीनों में भारत सरकार द्वारा की गई घोषणाओं की एक श्रृंखला ने देश के इस्पात निर्माताओं के एजेंडे में **इस्पात क्षेत्र का डीकार्बोनाइजेशन** प्रमुखता से ला दिया है, जिसमें पिछले वर्ष घोषित ₹5,000 करोड़ की एक योजना भी शामिल है, जिसे देश में इस्पात क्षेत्र के डीकार्बोनाइजेशन को तेज करने के लिए आने वाले महीनों में शुरू किया जाना है।

- India's steelmaking emissions are among the highest in the world, roughly 32% higher than the global average, and account for nearly 12% of the country's total greenhouse gas emissions.

भारत के इस्पात निर्माण से होने वाले उत्सर्जन का स्तर विश्व में सर्वाधिक स्तरों में से एक है, जो वैश्विक औसत से लगभग 32% अधिक है और देश के कुल ग्रीनहाउस गैस उत्सर्जन का लगभग 12% है।

- Driven by strong demand from infrastructure development, construction, and automotive manufacturing, India's steel production in FY 2025-26 was the

second-highest in the world, at around 160 million tonnes, behind only China.

बुनियादी ढाँचे के विकास, निर्माण और ऑटोमोबाइल विनिर्माण से उत्पन्न मजबूत मांग के कारण, वित्त वर्ष 2025-26 में भारत का इस्पात उत्पादन लगभग **160 मिलियन टन** रहा, जो चीन के बाद विश्व में दूसरा सबसे अधिक उत्पादन था।

- However, steel is a notoriously hard-to-abate industry, and India has its own set of challenges in bringing steelmaking emissions down to zero.

हालाँकि, इस्पात उद्योग को उत्सर्जन में कमी लाने के लिहाज से अत्यंत कठिन उद्योग माना जाता है और भारत के सामने इस्पात निर्माण से होने वाले उत्सर्जन को शून्य तक लाने में अपनी अलग चुनौतियाँ हैं।

Carbon-intensive method

कार्बन-गहन विधि

- The government's ongoing National Mission on Green Steel aims to lower steelmaking emissions intensity from the current 2.55-2.65 down to 2.2 tonnes of carbon dioxide-equivalent (tCO₂e) per tonne of crude steel by 2029-30.
सरकार के चल रहे **National Mission on Green Steel** का लक्ष्य इस्पात निर्माण की उत्सर्जन तीव्रता को वर्तमान 2.55-2.65 से घटाकर 2029-30 तक कच्चे इस्पात के प्रति टन **2.2 टन कार्बन डाइऑक्साइड-समतुल्य (tCO₂e)** करना है।
- A certification scheme it launched under the Mission in 2024 said any steel manufactured with an emissions intensity of less than 2.2 tCO₂e will be considered "green" and the greenest steel could still have an intensity of up to 1.6 tCO₂e.
2024 में मिशन के तहत शुरू की गई एक **प्रमाणन योजना** में कहा गया कि 2.2 tCO₂e से कम उत्सर्जन तीव्रता वाले किसी भी निर्मित इस्पात को **"ग्रीन"** माना जाएगा और सबसे कम उत्सर्जन वाला इस्पात भी 1.6 tCO₂e तक की तीव्रता वाला हो सकता है।
- Globally, the average emissions from steelmaking hover around 1.85 tCO₂e, making India's greenest steel still highly carbon-intensive.
वैश्विक स्तर पर इस्पात निर्माण से होने वाला औसत उत्सर्जन लगभग **1.85 tCO₂e** है, जिससे भारत का सबसे कम उत्सर्जन वाला इस्पात भी अभी अत्यधिक कार्बन-गहन बना हुआ है।
- "India is a developing economy, and we do not have much scrap available. If we have old steel available, we can recycle that scrap to produce new steel, which reduces our costs and emissions associated with reducing iron ore," Anubha Aggarwal, an analyst at the Centre for Research on Energy and Clean Air, an independent research organisation, said.
एक स्वतंत्र शोध संगठन **Centre for Research on Energy and Clean Air** की विश्लेषक अनुषा अग्रवाल ने कहा, "भारत एक विकासशील अर्थव्यवस्था है और हमारे पास अधिक मात्रा में स्क्रैप उपलब्ध नहीं है। यदि हमारे पास पुराना इस्पात उपलब्ध हो, तो हम उस स्क्रैप का पुनर्चक्रण करके नया इस्पात बना सकते हैं, जिससे लौह अयस्क को अपचयित करने से जुड़ी हमारी लागत और उत्सर्जन कम हो जाते हैं।"
- The traditional way to make steel involves burning coal to provide intense heat in a blast furnace, where iron ore is smelted into liquid form using coking coal to strip oxygen.
इस्पात बनाने की पारंपरिक विधि में **ब्लास्ट फर्नेस** में तीव्र ऊष्मा प्रदान करने के लिए कोयला जलाया जाता है, जहाँ ऑक्सीजन को हटाने के लिए कोकिंग कोल का उपयोग करके लौह अयस्क को पिघली हुई अवस्था में बदला जाता है।
- The carbon-rich liquid is then treated with pure oxygen at high speed in a basic oxygen furnace to convert it into high-quality steel by burning away all the impurities.
इसके बाद इस **कार्बन-समृद्ध द्रव** को बेसिक ऑक्सीजन फर्नेस में उच्च गति से शुद्ध ऑक्सीजन के साथ उपचारित किया जाता है, ताकि सभी अशुद्धियों को जलाकर इसे उच्च गुणवत्ता वाले इस्पात में परिवर्तित किया जा सके।
- This method, called BF-BOF (blast furnace-basic oxygen furnace), is widely used worldwide, and it is highly carbon-intensive.



BF-BOF (ब्लास्ट फर्नेस-बेसिक ऑक्सीजन फर्नेस) कहलाने वाली यह विधि विश्वभर में व्यापक रूप से उपयोग की जाती है और यह अत्यधिक कार्बन-गहन है।

- Reducing emissions to produce green steel will involve skipping the first step entirely, when possible, by reusing steel scrap to produce new steel and replacing coal-powered blast furnaces with electric arc furnaces (EAFs), which use electricity to produce steel from scrap, or direct reduced iron (DRI).

ग्रीन स्टील के उत्पादन के लिए उत्सर्जन कम करने में, जहाँ संभव हो, पहले चरण को पूरी तरह छोड़ना शामिल होगा, जिसमें इस्पात स्क्रेप का पुनः उपयोग करके नया इस्पात तैयार किया जाएगा तथा **कोयला-चालित ब्लास्ट फर्नेस** को इलेक्ट्रिक आर्क फर्नेस (EAFs) से बदला जाएगा, जो स्क्रेप या **Direct Reduced Iron (DRI)** से इस्पात बनाने के लिए बिजली का उपयोग करते हैं।

- Steel with a near-zero carbon footprint (excluding scope-3 emissions) could also use green hydrogen instead of natural gas to reduce iron ore and be powered by clean electricity generated from renewable sources.

लगभग **शून्य कार्बन फुटप्रिंट** वाले इस्पात में (स्कोप-3 उत्सर्जन को छोड़कर) लौह अयस्क के अपचयन के लिए प्राकृतिक गैस के स्थान पर **ग्रीन हाइड्रोजन** का उपयोग किया जा सकता है और इसे नवीकरणीय स्रोतों से उत्पन्न स्वच्छ बिजली से संचालित किया जा सकता है।

- However, 70.4% of global steelmaking still uses BF-BOF, according to a Nature Reviews Clean Technology analysis.

हालाँकि, **Nature Reviews Clean Technology** के एक विश्लेषण के अनुसार, वैश्विक इस्पात निर्माण का 70.4% अभी भी **BF-BOF** का उपयोग करता है।

- The remaining uses the EAF method, which has less than half the emissions intensity of BF-BOF steel.

शेष उत्पादन में **EAF विधि** का उपयोग होता है, जिसकी उत्सर्जन तीव्रता BF-BOF इस्पात की आधे से भी कम है।

‘Just a redirection’

‘केवल दिशा परिवर्तन’

- In India, the steel industry is relatively more heterogeneous: as per an India Steel Association report, 43% of total crude steel is produced at BF-BOF plants, 22% from EAF units, and 35% from electric induction furnaces (which use electromagnetic fields to process small batches of scrap or DRI and are known to be energy-efficient).

भारत में इस्पात उद्योग अपेक्षाकृत अधिक विविधतापूर्ण है: **India Steel Association** की एक रिपोर्ट के अनुसार, कुल कच्चे इस्पात का 43% BF-BOF संयंत्रों में, 22% EAF इकाइयों में और 35% इलेक्ट्रिक इंडक्शन फर्नेस में उत्पादित होता है, जो स्क्रेप या DRI के छोटे बैचों को संसाधित करने के लिए विद्युतचुंबकीय क्षेत्रों का उपयोग करते हैं और ऊर्जा-कुशल माने जाते हैं।

- Given the growing demand for steel and several planned steel plants, BF-BOF capacity is projected to increase to 56% by 2030.

इस्पात की बढ़ती मांग और कई नियोजित इस्पात संयंत्रों को देखते हुए, **BF-BOF क्षमता** के 2030 तक बढ़कर 56% होने का अनुमान है।

- In these circumstances, India essentially has a large window of opportunity to become one of the biggest players in green steel and iron production —if India decides to go the extra mile and invest in greener pathways rather than in coal-based steel, Clara Bachorz, a researcher working on steel sector decarbonisation at the Potsdam Institute for Climate Impact Research, Germany, and lead author of a recent paper investigating pathways to avert future emissions from steel industry through strategic green investments, said.

इन परिस्थितियों में भारत के पास मूलतः **ग्रीन स्टील और लौह उत्पादन** में दुनिया के सबसे बड़े खिलाड़ियों में से एक बनने का एक बड़ा अवसर है — यदि भारत कोयला-आधारित इस्पात के बजाय अधिक हरित मार्गों में अतिरिक्त प्रयास और निवेश करने का निर्णय लेता है, ऐसा जर्मनी के **Potsdam Institute for Climate**

Impact Research में इस्पात क्षेत्र के डीकार्बोनाइजेशन पर कार्य कर रही शोधकर्ता और रणनीतिक हरित निवेश के माध्यम से इस्पात उद्योग से भविष्य के उत्सर्जन को रोकने के मार्गों की जाँच करने वाले हालिया शोधपत्र की प्रमुख लेखिका क्लारा बाखोर्ज़ ने कहा।

- “And this [greener pathway] also has high potential for emission reductions compared to the cost of reducing those emissions later, mostly using bioenergy with carbon capture and storage or carbon dioxide removals,” she added.
उन्होंने आगे कहा, “और बाद में मुख्यतः कार्बन कैप्चर एंड स्टोरेज के साथ बायोएनर्जी या कार्बन डाइऑक्साइड हटाने के उपायों का उपयोग करके उन उत्सर्जनों को कम करने की लागत की तुलना में, यह [अधिक हरित मार्ग] उत्सर्जन में कमी की काफी अधिक क्षमता भी रखता है।”

- According to the paper, published in Nature Climate Change, avoiding new BF-BOFs and not relining young furnaces that are due for one, and diverting the investments to building EAFs, could almost halve global committed steel emissions.

Nature Climate Change में प्रकाशित शोधपत्र के अनुसार, नए BF-BOF संयंत्रों से बचना और जिन नए फर्नेस में री-लाइनिंग की आवश्यकता होने वाली है, उनकी री-लाइनिंग न करना तथा निवेश को EAF के निर्माण की ओर मोड़ना वैश्विक प्रतिबद्ध इस्पात उत्सर्जन को लगभग आधा कर सकता है।

- “We find that since the majority of these BOF plants in India have not broken ground, you could redirect investments already towards DRI-EAF, and this would not require additional investments. It would just be a redirection,” Dr. Bachorz said.
डॉ. बाखोर्ज़ ने कहा, “हम पाते हैं कि चूँकि भारत में इन BOF संयंत्रों में से अधिकांश पर अभी निर्माण कार्य शुरू नहीं हुआ है, इसलिए आप पहले से किए जा रहे निवेश को **DRI-EAF** की ओर मोड़ सकते हैं और इसके लिए अतिरिक्त निवेश की आवश्यकता नहीं होगी। यह केवल निवेश की दिशा बदलना होगा।”

- India's steel plants are indeed headed for relining blast furnaces, a capital-intensive but essential maintenance task done every two decades that can extend a plant's lifetime by another 15-20 years — but while locking in coal-based steel production and high carbon emissions for that time.

भारत के इस्पात संयंत्र वास्तव में **ब्लास्ट फर्नेस की री-लाइनिंग** की ओर बढ़ रहे हैं, जो हर दो दशक में किया जाने वाला एक पूंजी-गहन लेकिन आवश्यक रखरखाव कार्य है और जो किसी संयंत्र के जीवनकाल को अगले 15-20 वर्षों तक बढ़ा सकता है — लेकिन इसी अवधि के लिए कोयला-आधारित इस्पात उत्पादन और उच्च कार्बन उत्सर्जन को भी स्थायी रूप से बनाए रखता है।

- More than 43 million tonnes per annum of blast furnace capacity is due for relining before 2030, according to an analysis by Reclimatize, an independent research body examining India's decarbonisation efforts in hard-to-abate sectors.

Reclimatize, जो कठिन-से-डीकार्बोनाइज क्षेत्रों में भारत के डीकार्बोनाइजेशन प्रयासों का अध्ययन करने वाला एक स्वतंत्र शोध निकाय है, के एक विश्लेषण के अनुसार, 2030 से पहले **43 मिलियन टन प्रति वर्ष से अधिक ब्लास्ट फर्नेस क्षमता** की री-लाइनिंग की जानी है।

Switching to hydrogen

हाइड्रोजन की ओर संक्रमण

- In their study, Bachorz et al. modelled two global steel sector transition pathways aligned with 1.5 degree celsius of warming by the end of the century, with overshoot of up to 1.7 degree celsius.

अपने अध्ययन में, **Bachorz et al.** ने वैश्विक इस्पात क्षेत्र के लिए दो संक्रमण मार्गों का मॉडल तैयार किया, जो इस सदी के अंत तक **1.5 डिग्री सेल्सियस तापवृद्धि** के अनुरूप हैं, जिसमें अधिकतम **1.7 डिग्री सेल्सियस** तक का अस्थायी अतिक्रमण शामिल है।

- They found China and India dominate the dynamics of the fast-transition scenario, driven by their near-term BF-BOF investments that far exceed those of other regions.

उन्होंने पाया कि तेज़ संक्रमण परिदृश्य की गतिशीलता में चीन और भारत का प्रभुत्व है, जिसका कारण निकट अवधि में उनके **BF-BOF निवेश** हैं, जो अन्य क्षेत्रों के निवेश से कहीं अधिक हैं।

- In the slow-transition scenario, young blast furnaces are relined and announced BF-BOF plants are developed as planned, locking in emissions for decades and relying significantly more on currently nascent carbon dioxide removal technologies in future, in addition to deep emission cuts in other sectors to compensate for steel sector emissions.

धीमे संक्रमण परिदृश्य में नए ब्लास्ट फर्नेस को पुनः लाइनिंग की जाती है और घोषित BF-BOF संयंत्रों को योजना के अनुसार विकसित किया जाता है, जिससे दशकों तक **उत्सर्जन लॉक-इन** हो जाता है और भविष्य में वर्तमान में प्रारंभिक अवस्था वाली **कार्बन डाइऑक्साइड हटाने की प्रौद्योगिकियों** पर काफी अधिक निर्भरता रहती है, साथ ही इस्पात क्षेत्र के उत्सर्जन की भरपाई के लिए अन्य क्षेत्रों में उत्सर्जन में भारी कटौती करनी पड़ती है।

- In effect, the team's analysis showed early investment shifts — particularly in rapidly growing economies such as India — can substantially reduce future emissions at comparably low costs, making early action in steel a high-leverage climate mitigation opportunity, as in the fast transition scenario.

वास्तव में, टीम के विश्लेषण से पता चला कि **प्रारंभिक निवेश में बदलाव**, विशेषकर भारत जैसी तेजी से बढ़ती अर्थव्यवस्थाओं में, तुलनात्मक रूप से कम लागत पर भविष्य के उत्सर्जन को काफी हद तक कम कर सकते हैं, जिससे इस्पात क्षेत्र में प्रारंभिक कार्रवाई **जलवायु शमन के लिए उच्च-प्रभावी अवसर** बन जाती है, जैसा कि तेज़ संक्रमण परिदृश्य में देखा गया है।

- "Today, it is the most mature green steelmaking technology that you operate, either with natural gas, which still has emissions of around 1.2 tCO₂ per tonne of steel or with green hydrogen, which is then almost zero emissions," Dr. Bachorz said.
"आज यह सबसे परिपक्व **हरित इस्पात निर्माण प्रौद्योगिकी** है, जिसे या तो प्राकृतिक गैस के साथ संचालित किया जाता है, जिसमें अभी भी प्रति टन इस्पात लगभग **1.2 tCO₂ उत्सर्जन** होता है, या हरित हाइड्रोजन के साथ, जिसमें उत्सर्जन लगभग शून्य हो जाता है," डॉ. **Bachorz** ने कहा।
- According to the team's model, India first operates these DRI-EAF plants primarily with natural gas until 2040-2045, after which it switches to hydrogen as green hydrogen becomes sufficiently cost-competitive.

टीम के मॉडल के अनुसार, भारत इन **DRI-EAF संयंत्रों** को पहले मुख्य रूप से प्राकृतिक गैस से **2040-2045** तक संचालित करता है, जिसके बाद हरित हाइड्रोजन के पर्याप्त रूप से लागत-प्रतिस्पर्धी हो जाने पर वह हाइड्रोजन की ओर स्थानांतरित हो जाता है।

- "If you wanted to operate such a plant with green hydrogen today, my feeling is that this would be a lot more expensive," she continued.
"यदि आप आज ऐसे संयंत्र को **हरित हाइड्रोजन** से संचालित करना चाहें, तो मेरा मानना है कि यह काफी अधिक महंगा होगा," उन्होंने आगे कहा।
- In conclusion, the researchers suggested steel is less a 'hard-to-abate' sector than a sector facing a 'hard-to-abate barrier' that can be overcome at relatively moderate costs through timely investment decisions.
निष्कर्षतः, शोधकर्ताओं ने सुझाव दिया कि इस्पात क्षेत्र वास्तव में **'hard-to-abate'** क्षेत्र कम और **'hard-to-abate barrier'** का सामना करने वाला क्षेत्र अधिक है, जिसे समय पर निवेश संबंधी निर्णयों के माध्यम से अपेक्षाकृत मध्यम लागत पर दूर किया जा सकता है।

Defining 'green steel'

'हरित इस्पात' को परिभाषित करना

- "When you compare a sector like steel with aviation, it is relatively much easier to abate because the technology is already there, even though it is more expensive," Dr. Bachorz said.

“जब आप इस्पात जैसे क्षेत्र की तुलना विमानन क्षेत्र से करते हैं, तो इसे नियंत्रित करना तुलनात्मक रूप से काफी आसान है क्योंकि प्रौद्योगिकी पहले से उपलब्ध है, भले ही यह अधिक महंगी हो,” डॉ. Bachorz ने कहा।

- “So you need to pay the green premium and basically go over this investment barrier.
“इसलिए आपको हरित प्रीमियम का भुगतान करना होगा और मूलतः इस निवेश अवरोध को पार करना होगा।
- But once you commit, it is one of the easiest hard-to-abate sectors.”
लेकिन एक बार जब आप इसके लिए प्रतिबद्ध हो जाते हैं, तो यह hard-to-abate क्षेत्रों में सबसे आसान क्षेत्रों में से एक है।”
- “If we invest in EAF now, it would be much easier for us to make it cleaner later An old electric arc furnace pouring out steel into a small ladle car.
“यदि हम अभी EAF में निवेश करते हैं, तो बाद में इसे स्वच्छ बनाना हमारे लिए काफी आसान होगा। एक पुरानी इलेक्ट्रिक आर्क फर्नेस एक छोटी लैडल कार में इस्पात उंडेल रही है।
- The transformer vault can be seen at the right side.
दाईं ओर ट्रांसफॉर्मर वॉल्ट देखा जा सकता है।
- PUBLIC DOMAIN
सार्वजनिक डोमेन
- rather than investing in BF-BOF now and it becoming a stranded property later,” Ms. Aggarwal said.
BF-BOF में अभी निवेश करने और बाद में उसके फंसी हुई परिसंपत्ति (stranded property) बन जाने की तुलना में,” सुश्री Aggarwal ने कहा।
- “Because we have already seen this with thermal power plants, where it becomes really difficult to close them down, as a lot of investment has gone into them, and you want a return on your investments.
“क्योंकि हम इसे ताप विद्युत संयंत्रों के मामले में पहले ही देख चुके हैं, जहाँ उन्हें बंद करना वास्तव में बहुत कठिन हो जाता है, क्योंकि उनमें काफी निवेश हो चुका होता है और आप अपने निवेश पर प्रतिफल चाहते हैं।
- We do not want to repeat the same story with steel.”
हम इस्पात के मामले में उसी कहानी को दोहराना नहीं चाहते।”
- However, she warned that natural gas-based EAFs also carry the risks of fuel shortages, import dependence, geopolitical shocks, and stranded natural gas infrastructure (when used as a bridge fuel to reduce steel emissions).
हालाँकि, उन्होंने चेतावनी दी कि प्राकृतिक गैस-आधारित EAF में भी ईंधन की कमी, आयात पर निर्भरता, भू-राजनीतिक झटकों और निष्क्रिय हो जाने वाले प्राकृतिक गैस बुनियादी ढाँचे के जोखिम हैं, विशेषकर तब जब इसका उपयोग इस्पात उत्सर्जन को कम करने के लिए संक्रमणकालीन ईंधन (bridge fuel) के रूप में किया जाता है।
- ArcelorMittal Nippon Steel India became the first integrated steel producer to receive green steel certification in February this year.
ArcelorMittal Nippon Steel India इस वर्ष फरवरी में हरित इस्पात प्रमाणन प्राप्त करने वाला पहला एकीकृत इस्पात उत्पादक बना।
- According to government data, 89 steel units had been awarded the same certification as of March 31, covering a production volume of 12.34 million tonnes.
सरकारी आँकड़ों के अनुसार, 31 मार्च तक 89 इस्पात इकाइयों को यही प्रमाणन प्रदान किया जा चुका था, जिनकी कुल उत्पादन क्षमता 12.34 मिलियन टन थी।
- “You may have your doubts about whether [India's ‘green steel’] is really green, and the brackets for green steel certification are too large not to be very effective, but then at the end of the day, we have taken that initiative of defining what ‘green steel’ is, unlike anywhere else in the world,” Ms. Aggarwal added.
“आपको इस बात पर संदेह हो सकता है कि [भारत का ‘हरित इस्पात’] वास्तव में हरित है या नहीं, और हरित इस्पात प्रमाणन की श्रेणियाँ इतनी व्यापक हैं कि वे बहुत प्रभावी नहीं हो सकतीं, लेकिन अंततः हमने यह पहल

की है कि 'हरित इस्पात' क्या है, इसे परिभाषित किया जाए, जो दुनिया में अन्यत्र नहीं किया गया है," सुश्री Aggarwal ने कहा।

- "What we have not done is create the kind of market where there is also demand for green steel."
"हमने ऐसा बाज़ार तैयार नहीं किया है जहाँ हरित इस्पात की माँग भी मौजूद हो।"

'Future-proof pathway'

'भविष्य-सुरक्षित मार्ग'

- This January, the European Union's Carbon Border Adjustment Mechanism came into effect, imposing steep penalties on carbon-intensive imports, including India's high-emission steel, which is exported to several European countries.
इस जनवरी में यूरोपीय संघ का Carbon Border Adjustment Mechanism प्रभावी हुआ, जिसके तहत कार्बन-गहन आयातों पर भारी दंड लगाया गया, जिसमें भारत का उच्च-उत्सर्जन वाला इस्पात भी शामिल है, जिसे कई यूरोपीय देशों को निर्यात किया जाता है।
- In response, India has been seeking alternative markets and boosting domestic consumption, while the market and compliance obligations may be forcing the steel industry to rethink investment decisions and adopt steel production technologies with lower emissions intensity.
इसके जवाब में, भारत वैकल्पिक बाजारों की तलाश और घरेलू खपत बढ़ाने पर जोर दे रहा है, जबकि बाजार तथा अनुपालन संबंधी दायित्व इस्पात उद्योग को निवेश संबंधी निर्णयों पर पुनर्विचार करने और कम उत्सर्जन-तीव्रता वाली इस्पात उत्पादन प्रौद्योगिकियों को अपनाने के लिए प्रेरित कर सकते हैं।
- In March, the Union Ministry of New and Renewable Energy funded three pilot green hydrogen projects totalling more than Rs. 400 crore to pursue innovation and validate the technical feasibility of using 100% green hydrogen in furnaces and other stages for low-carbon steel production.
मार्च में, केंद्रीय नवीन और नवीकरणीय ऊर्जा मंत्रालय ने कुल ₹400 करोड़ से अधिक की तीन पायलट हरित हाइड्रोजन परियोजनाओं को वित्तपोषित किया, ताकि नवाचार को आगे बढ़ाया जा सके और निम्न-कार्बन इस्पात उत्पादन के लिए भट्टियों तथा अन्य चरणों में 100% हरित हाइड्रोजन के उपयोग की तकनीकी व्यवहार्यता को प्रमाणित किया जा सके।
- Last year, JSW Energy commissioned its first, and India's largest, commercial-scale green hydrogen plant in Karnataka's Vijayanagar to supply 100% green hydrogen to adjoining JSW Steel's DRI unit.
पिछले वर्ष, JSW Energy ने कर्नाटक के विजयनगर में अपना पहला और भारत का सबसे बड़ा वाणिज्यिक स्तर का हरित हाइड्रोजन संयंत्र शुरू किया, जिसका उद्देश्य निकटवर्ती JSW Steel की DRI इकाई को 100% हरित हाइड्रोजन की आपूर्ति करना है।
- ArcelorMittal Nippon Steel India, in the meantime, is promoting its green steel to buyers interested in slashing their scope-3 emissions.
इस बीच, ArcelorMittal Nippon Steel India अपने हरित इस्पात को उन खरीदारों के बीच बढ़ावा दे रही है जो अपने Scope-3 उत्सर्जन में भारी कमी करने में रुचि रखते हैं।
- India's green steel journey is still nascent but recent developments and policies have indicated that this hard-to-abate sunrise industry is rising up to the net-zero challenge.
भारत की हरित इस्पात यात्रा अभी प्रारंभिक अवस्था में है, लेकिन हाल के घटनाक्रमों और नीतियों से संकेत मिलता है कि यह hard-to-abate उभरता हुआ उद्योग नेट-ज़ीरो की चुनौती का सामना करने के लिए आगे बढ़ रहा है।
- However, balancing growing demand with climate goals remains a formidable challenge for now, with a lot riding on green hydrogen availability and affordability.
हालाँकि, बढ़ती माँग को जलवायु लक्ष्यों के साथ संतुलित करना फिलहाल एक बड़ी चुनौती बनी हुई है, जिसमें बहुत कुछ हरित हाइड्रोजन की उपलब्धता और वहनीयता पर निर्भर करता है।



Fear revisits residents of Western Ghats

The seventh draft declaring large swathes in the Western Ghats as eco-sensitive zones was issued on July 27 by the Centre. **Sathish GT** examines the apprehensions it has rekindled in Karnataka



Scenic: The Kemu Hole flows along the ecologically sensitive area of the Western Ghats, near Gundya. K. MURALI KUMAR

In August 29, hundreds of farmers from Hosanagara taluk in Shivamogga district marched about nine kilometres from the Ganesh temple in Karanagiri to Hosanagara town, protesting against the latest draft notification proposing to declare large parts of the Western Ghats an Ecologically Sensitive Area (ESA). Farmers across Shivamogga and neighbouring districts in the Malnad region are planning similar protests in the coming days. Their central demand is that the Karnataka government should conduct a physical survey of the land and exclude human settlements and cultivated areas from the proposed ESA boundaries.

The chain of events that led to this notification began with another march nearly four decades ago – one that set out to save the Western Ghats. On November 1, 1987, two groups of scientists, ecologists, environmentalists, and activists began walking simultaneously from the northern and southern extremities of the Western Ghats – Navapur in Dhule district, Maharashtra, and Kanyakumari in Tamil Nadu – towards a common meeting point in Goa. Among the organisers and participants were anthropologist Kailash Malhotra, S.R. Hiremath, Pandurang Hegde, and several others from Karnataka. Along the route, participants held public meetings and documented the ecological condition of the landscape. The effort culminated in a conference in Goa in February 1988, where ecologist



Madhav Gadgil of the Indian Institute of Science, Bengaluru, chaired the technical session on the region's ecological status and the measures needed to conserve it. The group remained active in the years that followed: a yatra marked the march's 10th anniversary in 1998, and further meetings were held in 2009 and, more significantly, on February 18, 2010, at the Keystone Foundation in Kotagiri, Nilgiris, Tamil Nadu. The organisers invited the then Union Minister for Environment and Forests, Jairam Ramesh, to inaugurate the meeting and appealed to him to constitute an expert panel to examine the status of the Western Ghats and recommend conservation and governance mechanisms.

Western Ghats Ecology Expert Panel
Less than a month later, on March 4, 2010, the Ministry of Environment and Forests set up the Western Ghats Ecology Expert Panel (WGEEP) under Prof. Gadgil's chairmanship, comprising nine non-government and five official members. Its mandate was to assess the ecological status of the Western Ghats, demarcate areas to be notified as ecologically sensitive zones under the Environment (Protection) Act, 1986, and recommend measures for conservation and rejuvenation through wide consultation.

The panel submitted its final report to the Ministry on August 31, 2011 – by which time Mr. Ramesh had been replaced as Minister by Jayanthi Natarajan. The release was delayed. Despite repeated RTI applications and an order from the Central Information Commission, the Ministry resisted disclosure and even approached the Delhi High Court seeking a stay. The report was finally uploaded on the Ministry's website on May 23, 2012. Prof. Gadgil has since narrated the events surrounding the report in his autobiography, *A Walk up the Hill*.

The WGEEP report advocated a people-oriented model of development, going beyond regulation to propose science-based initiatives such as financial rewards for individual farmers and pay-

People with vested interests are misleading the public with false information about the restrictions



Up in arms: Hundreds of farmers took part in a protest march opposing the ESA notification in Hosanagara on August 29.



A view of the ecologically-sensitive area of the Western Ghats, near Agumbe; (right) residents of Cheekarahalli hamlet in Uralagallu village have been living without electricity for many decades. K. MURALI KUMAR & SATHISH GT.

ments for ecosystem services to communities. It cited the Australian Soil Carbon Accreditation Scheme, under which farmers were paid retrospectively for verified increases in soil carbon on regeneratively managed farmland, as one such model.

Kasturirangan High-Level Working Group
The WGEEP report drew strong opposition, including from the State governments concerned. Taking the criticism into account, the Union Ministry constituted a High-Level Working Group (HLWG) under K. Kasturirangan to prepare a "workable and implementable" report on conserving the Western Ghats.

The panel visited several places, including Sakleshpur in Hassan district, and submitted its report on April 15, 2013. It recommended that about 37% of the Western Ghats – 59,940 sq km, a continuous band of natural vegetation stretching roughly 1,500 km across six States – be declared an ESA. Karnataka accounted for the largest share, around 20,668 sq km.

Among the panel's proposed restrictions within the ESA were a complete ban on mining and sand extraction, with existing operations to be phased out within five years or on expiry of their lease, restrictions on housing and construction projects exceeding 20,000 sq m, a ban on all "red category" (highly polluting) industries, with existing units to close or relocate within five years and encouragement of organic farming and closer scrutiny of other development activities.

All the State governments concerned, including Karnataka and Kerala, opposed the recommendations, and elected representatives – particularly in Kerala – argued they would severely disrupt local livelihoods.

Prof. Gadgil, too, objected strongly to the Kas-

turirangan report, calling it flawed on several counts. In an open letter to Mr. Kasturirangan published in *The Hindu*, he noted that while the WGEEP had proposed a graded, participatory approach with a major role for grassroots input, the HLWG had effectively partitioned the landscape – roughly a third to be protected by "funds and guards" as natural landscape, with the remaining two-thirds, labelled cultural landscape, open to development.

The Ministry has issued seven draft notifications since 2014. All earlier six were opposed by the States concerned and residents of the affected regions have also filed numerous objections. The seventh draft, issued on July 27, 2026, allows 60 days to file objections. It proposes a total ESA area of 56,825 sq km, of which 29,668 sq km – spread across 149 villages in Belagavi, Chamarajanagar, Chikmagalur, Dakshina Kannada, Hassan, Kodagu, Mysuru, Shivamogga, Udipi, and Uttara Kannada districts – falls in Karnataka. On September 3, 2026, the Karnataka Cabinet announced a three-day special session of the legislature from September 21 to discuss drought. The session will also see a detailed discussion on the Kasturirangan report.

Life under existing forest rules

The deeper fear among residents of the Western Ghats foothills stems from hardships they already face under existing forest regulations – hundreds of villages lack basic amenities even without the ESA in force.

Take Uralagallu in Sagur taluk of Shivamogga district, where families displaced by the Lingamakki dam across the Sharavathi river in the 1960s reside. The village today has roughly 50 to 56 families and a population of 150 to 200, with no proper road, school, or primary health centre, and its nearest bus stop being about 10

km away. Residents say an ambulance has not visited the settlement in recent years. Ironically, the people who surrendered their land for a hydel power project still lack electricity decades later, because the Forest Department has repeatedly denied clearance for road and power-supply works.

Nagaraj Salkod, a resident of Uralagallu, said a majority of the parents in the village send their children to either hostels or relatives' places early on. "My two children stay at a relative's place at Mavinagundi, about 50 km from my place, as we don't have a school in the village," he said. They walk 10 km to Kanuru to catch a bus.

Similar struggles persist in remote villages across Chikmagalur, Hassan, and Shivamogga districts, where residents battle forest restrictions to secure electricity, road access, or emergency healthcare.

At Byrapura in N.R. Pura taluk of Chikmagalur district, schoolchildren recently encountered a leopard while returning home, and the fear kept them away from school for several days; parents say a proper road would enable safer transport and reduce such encounters, but forest regulations continue to block it.

In Karimane village of Hosanagara taluk, large parts of the settlement – including the gram panchayat building itself – stand on forest land, leaving the panchayat office without an official khata (title) and the community in administrative limbo.

These cases illustrate the daily plight of people living under current forest rules, raising the question of what their situation will become under the far stricter regime the Kasturirangan panel has recommended. Separately, bagair hukum (unauthorised) cultivators and those displaced by dam projects are yet to receive the compensatory land promised to them under existing rules. The people fear that if the ESA comes into effect, these claims could remain unresolved indefinitely.

The Kerala model

Many in the Malnad region are pressing the State government to replicate Kerala's approach. Kerala reduced its proposed ESA area from 13,108 sq km to 9,937 sq km (comprising 9,037 sq km of forest and 886.7 sq km of non-forest land) after conducting a physical survey – a reduction of more than 3,000 sq km that has since been incorporated into the revised notification. The people of the Malnad region want the Karnataka government to undertake a similar exercise to pare down the area proposed for the State.

B.Y. Kaghavendra, Shivamogga MP, who was among the political leaders who joined the protest marches, said restrictions on township projects and the push for organic farming were the primary concerns in the Malnad region. Many farmers in Shivamogga, Uttara Kannada, Chikmagalur, and Kodagu, who grow plantation crops such as coffee and areca, use chemical fertilizers to protect their crops from disease. "If there are restrictions on the use of such inputs, how will farmers protect their plantations? Similarly, restrictions on house construction are unacceptable," he said.

R.M. Manjunath Gowda, president of the Shivamogga Central Cooperative Bank, has brought together a large section of farmers under the banner of the Western Ghats Raitha Sahakari Vekile to organise protests against the notification. The vekile has also launched a website with a tool to help the public file objections online. Notably, the organisation is not opposing the notification outright this time – it is instead demanding that the State government follow the Kerala model to minimise the impact.

Leaders across parties have urged the State government to conduct a physical survey and propose the ESA area accordingly, excluding human habitations and cultivated land. Understanding the scale of public concern, Chief Minister D.K. Shivakumar has agreed to convene a special session of the Karnataka legislature on the issue, a decision welcomed across party lines. Minister for School Education Madhu Hangarappa, who is also in charge of Shivamogga district, has said the State government will oppose the draft notification. Former Minister and Congress leader Kinnane Ratnakar recently burnt a copy of the Kasturirangan report at a press conference in Tirunthalli.

The other side

Amid the many voices opposing the draft notification, there is also support for stricter conservation measures. Several environmentalists argue that the Kasturirangan report was a "diluted version" of Prof. Gadgil's, which they consider better suited to conserving the Western Ghats with active local participation.

Whenever landslides or flash floods strike Kerala or Kodagu, this argument resurfaces – environmentalists blaming policymakers for ignoring Prof. Gadgil's recommendations. But the debate typically subsides within days, as routine concerns over access, amenities, roads, and electricity take over.

Akhilesh Chipli, environmentalist based in Sagur taluk, said he has advocated strict forest protection measures along the lines of Prof. Gadgil's recommendations since 2016. "A major portion of the 20,668 sq km proposed for the ESA is already notified forest area; the remainder is a small quantity, and there should be no opposition to including it in the proposed ESA. People with vested interests are misleading the public with false information about the restrictions. For instance, why should ordinary people worry about a ban on mining or red-category industries? Even the push for organic farming is good for everyone," he said.

08S9. Fear revisits residents of Western Ghats

पश्चिमी घाट के निवासियों में फिर लौटा भय

- Less than a month later, on **March 4, 2010**, the Ministry of Environment and Forests set up the **Western Ghats Ecology Expert Panel (WGEEP)** under Prof. Gadgil's chairmanship, comprising nine non-government and five official members.



- एक महीने से भी कम समय बाद, 4 मार्च, 2010 को पर्यावरण एवं वन मंत्रालय ने प्रोफेसर गाडगिल की अध्यक्षता में पश्चिमी घाट पारिस्थितिकी विशेषज्ञ समिति (WGEEP) गठित की, जिसमें नौ गैर-सरकारी तथा पाँच आधिकारिक सदस्य शामिल थे।
- Its mandate was to assess the ecological status of the Western Ghats, demarcate areas to be notified as **ecologically sensitive zones** under the **Environment (Protection) Act, 1986**, and recommend measures for conservation and rejuvenation through wide consultation.
- इसका अधिदेश पश्चिमी घाट की पारिस्थितिक स्थिति का आकलन करना, पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पारिस्थितिक रूप से संवेदनशील क्षेत्रों के रूप में अधिसूचित किए जाने वाले क्षेत्रों का सीमांकन करना तथा व्यापक परामर्श के माध्यम से संरक्षण एवं पुनरुज्जीवन के उपायों की अनुशंसा करना था।
- The panel submitted its final report to the Ministry on **August 31, 2011** — by which time Mr. Ramesh had been replaced as Minister by **Jayanthi Natarajan**.
- समिति ने अपनी अंतिम रिपोर्ट 31 अगस्त, 2011 को मंत्रालय को प्रस्तुत की—उस समय तक मंत्री के रूप में श्री रमेश का स्थान जयंती नटराजन ने ले लिया था।
- The report was finally uploaded on the Ministry's website on **May 23, 2012**.
- अंततः रिपोर्ट को 23 मई, 2012 को मंत्रालय की वेबसाइट पर अपलोड किया गया।
- Prof. Gadgil has since narrated the events surrounding the report in his autobiography, **A Walk up the Hill**.
- इसके बाद प्रोफेसर गाडगिल ने अपनी आत्मकथा A Walk up the Hill में इस रिपोर्ट से संबंधित घटनाओं का वर्णन किया है।
- The WGEEP report advocated a **people-oriented model of development**, going beyond regulation to propose science-based initiatives such as financial rewards for individual farmers and **payments for ecosystem services** to communities.
- WGEEP रिपोर्ट ने जनोन्मुखी विकास मॉडल की वकालत की तथा विनियमन से आगे बढ़ते हुए व्यक्तिगत किसानों के लिए वित्तीय प्रोत्साहन और समुदायों को पारिस्थितिकी-तंत्र सेवाओं के लिए भुगतान जैसी विज्ञान-आधारित पहलों का प्रस्ताव रखा।
- It cited the **Australian Soil Carbon Accreditation Scheme**, under which farmers were paid retrospectively for verified increases in soil carbon on regeneratively managed farmland, as one such model.
- इसने ऑस्ट्रेलियाई मृदा कार्बन प्रत्यायन योजना को ऐसे ही एक मॉडल के रूप में उद्धृत किया, जिसके अंतर्गत पुनर्योजी रूप से प्रबंधित कृषि भूमि में मृदा कार्बन की सत्यापित वृद्धि के लिए किसानों को पूर्वव्यापी भुगतान किया जाता था।

Kasturirangan High-Level Working Group

कस्तूररंगन उच्चस्तरीय कार्यसमूह

- Taking the criticism into account, the Union Ministry constituted a **High-Level Working Group (HLWG)** under **K. Kasturirangan** to prepare a “workable and implementable” report on conserving the Western Ghats.
- आलोचनाओं को ध्यान में रखते हुए केंद्रीय मंत्रालय ने पश्चिमी घाट के संरक्षण पर एक “व्यावहारिक और क्रियान्वित किए जाने योग्य” रिपोर्ट तैयार करने के लिए के. कस्तूररंगन की अध्यक्षता में एक उच्चस्तरीय कार्यसमूह (HLWG) गठित किया।
- It recommended that about **37% of the Western Ghats — 59,940 sq km**, a continuous band of natural vegetation stretching roughly **1,500 km across six States**, be declared an ESA.
- इसने अनुशंसा की कि पश्चिमी घाट के लगभग 37% भाग—59,940 वर्ग किलोमीटर—को ESA घोषित किया जाए, जो छह राज्यों में लगभग 1,500 किलोमीटर तक विस्तृत प्राकृतिक वनस्पति की एक सतत पट्टी है।
- Karnataka accounted for the largest share, around **20,668 sq km**.
- इसमें कर्नाटक का हिस्सा सबसे बड़ा, लगभग 20,668 वर्ग किलोमीटर, था।
- Among the panel's proposed restrictions within the ESA were a complete ban on **mining and sand extraction**, with existing operations to be phased out within five years or on expiry of



their lease, restrictions on housing and construction projects exceeding **20,000 sq m**, a ban on all **“red category” industries**, with existing units to close or relocate within five years and encouragement of **organic farming** and closer scrutiny of other development activities.

- ESA के भीतर समिति द्वारा प्रस्तावित प्रतिबंधों में **खनन और रेत निष्कर्षण पर पूर्ण प्रतिबंध**, मौजूदा गतिविधियों को पाँच वर्षों के भीतर अथवा उनकी पट्टा अवधि समाप्त होने पर चरणबद्ध रूप से बंद करना, **20,000 वर्ग मीटर** से अधिक की आवासीय और निर्माण परियोजनाओं पर प्रतिबंध, सभी **“लाल श्रेणी के उद्योगों”** पर प्रतिबंध, मौजूदा इकाइयों को पाँच वर्षों के भीतर बंद करना अथवा स्थानांतरित करना, **जैविक खेती** को प्रोत्साहन देना तथा अन्य विकासात्मक गतिविधियों की अधिक गहन जाँच शामिल थी।

Western Ghats as an Ecologically Sensitive Area (ESA).

1. First, what is an Ecologically Sensitive Area (ESA)?

An **Ecologically Sensitive Area** is an environmentally fragile region where certain activities capable of causing serious ecological damage are **prohibited or regulated**.

It does **not** mean that the entire area becomes a national park, that everybody living there must leave, or that agriculture and normal life automatically stop.

Think of it as a **protective filter on development**:

People can continue living there, but highly destructive activities such as mining, quarrying or heavily polluting industries may face prohibition or strict regulation.

The Western Ghats ESA proposal is being pursued under the **Environment (Protection) Act, 1986**.

2. Why are the Western Ghats so important?

The **Western Ghats**, also known as the **Sahyadris**, extend for roughly **1,500 km** along India's western side, from the vicinity of the Tapi/Tapti in the north to **Kanyakumari** in the south.

They traverse six States:





Gujarat → Maharashtra → Goa → Karnataka → Kerala → Tamil Nadu

They are a globally important **biodiversity hotspot** containing numerous endemic species—species found naturally in a limited geographical area. The Ghats also contain habitats such as **shola forests, Myristica swamps and lateritic plateaus** and species such as the **lion-tailed macaque and Nilgiri tahr**. They are also the source region of major river systems including the **Godavari, Krishna and Cauvery**.

3. Where did the ESA controversy begin? — Gadgil Committee

- In 2010, the government constituted the **Western Ghats Ecology Expert Panel (WGEEP)** under ecologist **Prof. Madhav Gadgil**.
- The Gadgil approach favoured extensive ecological protection and proposed different degrees of ecological sensitivity, with stronger restrictions in the most sensitive areas.
- However, the recommendations generated substantial opposition and concerns from States and local communities over their possible effects on **agriculture, settlements, infrastructure and economic activity**. The government subsequently constituted another committee.

4. Kasturirangan Committee — a less extensive approach

- In 2012, a **High-Level Working Group (HLWG)** headed by **Dr. K. Kasturirangan** was constituted.
- It distinguished broadly between:
 - **Cultural landscape** → villages, settlements, agriculture and plantations.
 - **Natural landscape** → forests and relatively undisturbed natural ecosystems.
- The committee estimated that roughly **60%** of the Western Ghats was cultural landscape and about **40% natural landscape**.
- It recommended concentrating stringent protection on the biologically rich and relatively contiguous portions of the natural landscape—approximately **37% of the Western Ghats**, then calculated at around **59,940 sq km**.

5. What is the present proposal?

- This is important for UPSC because the matter is **still evolving**.
- The Union Environment Ministry's 2024 draft proposed **56,825.7 sq km** as Western Ghats ESA across the six States.
- The proposed distribution was approximately:

State	Proposed ESA
Karnataka	20,668 sq km
Maharashtra	17,340 sq km
Kerala	9,993.7 sq km
Tamil Nadu	6,914 sq km



State	Proposed ESA
Goa	1,461 sq km
Gujarat	449 sq km
Total	56,825.7 sq km

- As of **July 2026**, the Centre issued another draft iteration covering the same overall proposed area, after the previous draft lapsed amid unresolved disagreements with States.
- The final ESA can be notified **State-wise in phases or through one combined notification**, and the actual area remains subject to State recommendations, stakeholder views and expert examination.
- So, for an examination, **do not write that the entire 56,825.7 sq km has already been finally notified as ESA.**

6. What activities are the main concern?

- The protective framework targets activities with potentially severe ecological impacts. Government directions for the proposed ESA have covered five major categories:
 - ☐ **Mining, quarrying and sand mining**
 - ☐ **New thermal power plants**
 - ☐ **Large building and construction projects above specified thresholds**
 - ☐ **Large township/area-development projects**
 - ☐ **Red-category, highly polluting industries**
- Government directions specify, among other thresholds, building/construction projects above **20,000 sq m** and township/area-development projects of **50 hectares or more and/or built-up area of 1,50,000 sq m or more.**

7. Why are States and local communities worried?

- This is where the issue becomes complicated.
 - ☐ **Fear about livelihoods**
- Millions of people live within the Western Ghats landscape. They depend upon **agriculture, plantations, tourism, construction and local natural resources.**
- A farmer may therefore ask:
 - ☐ “If my village becomes ESA, will I still be able to build a house, cultivate my land, repair a road or sell my property?”
- Even when a proposed regulation does not prohibit all such activities, **uncertainty and misinformation about future restrictions** can generate strong resistance.
 - ☐ **Problem of demarcation**
- A major question is:
- Exactly which village, survey number or parcel of land should be inside the ESA?**

- A satellite image may classify an area as natural landscape, while people living there may argue that it actually contains **farms, plantations, houses or other long-established human uses**.
- Therefore, **ground-level verification** becomes critical.
 - **Development versus conservation**
- Western Ghats States require:
- **roads + electricity + housing + tourism + employment + hydropower + infrastructure.**
- But uncontrolled:
- **quarrying + mining + deforestation + hill cutting + construction**
- can weaken an already fragile mountain ecosystem.
- The real policy challenge is therefore **not “development OR environment.”**
- It is:
- **“What kind of development, where, and at what ecological cost?”**

GS Paper III: Internal Security		08 September 2026
TOPICS COVERED		
08S9	No ban on village volunteers, Arambai Tenggol: Manipur CM मणिपुर के मुख्यमंत्री: ग्राम स्वयंसेवकों और अरामबाई तेंगगोल पर कोई प्रतिबंध नहीं	
08S9	Global watchdog says rise of ‘digital hawala’ is aiding money laundering, terror financing वैश्विक निगरानी संस्था का कहना है कि ‘डिजिटल हवाला’ का बढ़ता चलन धन शोधन और आतंकवाद के वित्तपोषण में मदद कर रहा है	
08S9	Are nicotine pouches beyond the law? क्या निकोटीन पाउच कानून के दायरे से बाहर हैं?	

08S9. No ban on village volunteers, Arambai Tenggol: Manipur CM
मणिपुर के मुख्यमंत्री: ग्राम स्वयंसेवकों और अरामबाई तेंगगोल पर कोई प्रतिबंध नहीं

- Manipur Chief Minister Yumnam Khemchand Singh told the State Assembly on Monday that neither the “village volunteers” of the hills and the Imphal Valley, nor the **Arambai Tenggol** were banned organisations.
 मणिपुर के मुख्यमंत्री युमनाम खेमचंद सिंह ने सोमवार को राज्य विधानसभा को बताया कि पहाड़ी क्षेत्रों और इम्फाल घाटी के “ग्राम स्वयंसेवक” तथा अरामबाई तेंगगोल, दोनों में से कोई भी प्रतिबंधित संगठन नहीं है।



Global watchdog says rise of 'digital hawala' is aiding money laundering, terror financing

GS III: Internal Security

Devesh K. Pandey
NEW DELHI

A centuries-old underground banking system is now transforming into a tech-enabled network, with virtual assets adding new layers to "digital hawala".

The shift is being exploited for purposes ranging from routine money laundering to, in some cases, financing terrorist organisations, the latest Financial Action Task Force (FATF) report said.

The global money laundering and terror financing watchdog's report, titled "Investigating Professional Money Laundering, Underground Banking, and the Use of Hawala and Other Similar Service Providers", identifies the fusion of virtual assets with the traditional "hawala" system as

one of the most significant developments. According to the report, nearly 70% of surveyed jurisdictions have reported the integration of new technologies into such networks.

Forms of digital hawala

The study has flagged six forms of "digital hawala" – a term covering a spectrum of technologies that facilitate the coordination, execution, settlement, or concealment of transactions.

One configuration involves digital coordination but traditional settlement, with operators using encrypted messaging applications, shared ledgers and online platforms to communicate instructions, recruit clients and couriers, and maintain records. The second is "digital customer interface", such as mobile



The latest FATF report has flagged six forms of "digital hawala". FILE PHOTO

wallets or fintech apps, although settlement between operators happens via cash or trade in both cases.

The next is virtual asset-based settlement, where stablecoins are used to settle balances directly. In the "integration with formal digital infrastructure" con-

figuration, funds are moved via payment service providers, fintech platforms, and virtual International Bank Account Numbers (IBANs).

The fifth is artificial intelligence-based tools for automated transaction structuring, dynamic mule-account routing, and high-speed fiat-to-cryptocurrency conversion. The last one involves "hawala" apps, which may be bundled digital ecosystems combining messaging, cloud storage, social media, Virtual Asset Service Providers (VASPs), lending apps, and even gaming platforms.

The FATF found that these configurations make transactions faster, more opaque and more complex, while expanding the network's reach and resilience.

The report said that digitisation is acting as a catalyst for traditional settlement mechanisms rather than replacing them, with cash remaining critical at the collection and exit points.

Turkiye case study

It cited a case study of Türkiye's discovery of a "digital hawala" network financing the terror group, the Islamic State of Iraq and the Levant (ISIL). In 2023, raids on a self-described ISIL "administrative officer" led to the seizure of about \$57,250 in cash, followed by a further \$5,54,000, along with "hawala" notebooks and digital transfer receipts.

A jeweller and two mobile phone shops operated as fronts, and the transfers were disguised as charity donations.

08S9. Global watchdog says rise of 'digital hawala' is aiding money laundering, terror financing

वैश्विक निगरानी संस्था का कहना है कि 'डिजिटल हवाला' का बढ़ता चलन धन शोधन और आतंकवाद के वित्तपोषण में मदद कर रहा है

- A centuries-old underground banking system is now transforming into a tech-enabled network, with virtual assets adding new layers to "digital hawala".
सदियों पुरानी भूमिगत बैंकिंग प्रणाली अब प्रौद्योगिकी-सक्षम नेटवर्क में बदल रही है, जिसमें वर्चुअल परिसंपत्तियाँ "डिजिटल हवाला" में नई परतें जोड़ रही हैं।
- The shift is being exploited for purposes ranging from routine money laundering to, in some cases, financing terrorist organisations, the latest Financial Action Task Force (FATF) report said.
वित्तीय कार्रवाई कार्यबल (FATF) की नवीनतम रिपोर्ट के अनुसार, इस बदलाव का इस्तेमाल सामान्य धन शोधन से लेकर कुछ मामलों में आतंकवादी संगठनों के वित्तपोषण तक के लिए किया जा रहा है।
- The global money laundering and terror financing watchdog's report, titled "Investigating Professional Money Laundering, Underground Banking, and the Use of Hawala and Other Similar Service Providers", identifies the fusion of virtual assets with the traditional "hawala" system as one of the most significant developments.
वैश्विक धन शोधन और आतंकवादी वित्तपोषण निगरानी संस्था की "Investigating Professional Money Laundering, Underground Banking, and the Use of Hawala and Other Similar Service

Providers" शीर्षक वाली रिपोर्ट वर्चुअल परिसंपत्तियों के पारंपरिक "हवाला" प्रणाली के साथ विलय को सबसे महत्वपूर्ण घटनाक्रमों में से एक के रूप में चिन्हित करती है।

- According to the report, nearly 70% of surveyed jurisdictions have reported the integration of new technologies into such networks.

रिपोर्ट के अनुसार, सर्वेक्षण में शामिल लगभग 70% न्यायक्षेत्रों ने ऐसे नेटवर्क में नई प्रौद्योगिकियों के एकीकरण की सूचना दी है।

Forms of digital hawala

डिजिटल हवाला के स्वरूप

- The study has flagged six forms of "digital hawala" — a term covering a spectrum of technologies that facilitate the coordination, execution, settlement, or concealment of transactions.
अध्ययन ने "डिजिटल हवाला" के छह स्वरूपों को चिन्हित किया है—यह शब्द ऐसी विभिन्न प्रौद्योगिकियों के समूह को दर्शाता है, जो लेन-देन के समन्वय, निष्पादन, निपटान या छिपाने में सहायता करती हैं।
- One configuration involves digital coordination but traditional settlement, with operators using encrypted messaging applications, shared ledgers and online platforms to communicate instructions, recruit clients and couriers, and maintain records.
एक स्वरूप में डिजिटल समन्वय लेकिन पारंपरिक निपटान शामिल है, जिसमें संचालक निर्देशों के संचार, ग्राहकों और कुरियरों की भर्ती तथा रिकॉर्ड बनाए रखने के लिए एन्क्रिप्टेड मैसेजिंग एप्लिकेशन, साझा लेजर और ऑनलाइन प्लेटफॉर्म का उपयोग करते हैं।
- The second is "digital customer interface", such as mobile wallets or fintech apps, although settlement between operators happens via cash or trade in both cases.
दूसरा स्वरूप "डिजिटल ग्राहक इंटरफेस" है, जैसे मोबाइल वॉलेट या फिनटेक ऐप, हालांकि दोनों ही मामलों में संचालकों के बीच निपटान नकदी या व्यापार के माध्यम से होता है।
- The next is virtual asset-based settlement, where stablecoins are used to settle balances directly.
अगला स्वरूप वर्चुअल परिसंपत्ति-आधारित निपटान है, जिसमें शेष राशि का सीधे निपटान करने के लिए स्टेबलकॉइन का उपयोग किया जाता है।
- In the "integration with formal digital infrastructure" configuration, funds are moved via payment service providers, fintech platforms, and virtual International Bank Account Numbers (IBANs).
"औपचारिक डिजिटल अवसंरचना के साथ एकीकरण" वाले स्वरूप में भुगतान सेवा प्रदाताओं, फिनटेक प्लेटफॉर्म और वर्चुअल इंटरनेशनल बैंक अकाउंट नंबर (IBANs) के माध्यम से धन स्थानांतरित किया जाता है।
- The fifth is artificial intelligence-based tools for automated transaction structuring, dynamic mule-account routing, and high-speed fiat-to-cryptocurrency conversion.
पाँचवाँ स्वरूप कृत्रिम बुद्धिमत्ता-आधारित उपकरणों का है, जिनका उपयोग स्वचालित लेन-देन संरचना, गतिशील म्यूल-अकाउंट रूटिंग और तीव्र गति से फिएट मुद्रा को क्रिप्टोकॉइन में बदलने के लिए किया जाता है।
- The last one involves "hawala" apps, which may be bundled digital ecosystems combining messaging, cloud storage, social media, Virtual Asset Service Providers (VASPs), lending apps, and even gaming platforms.
छठे स्वरूप में "हवाला" ऐप शामिल हैं, जो मैसेजिंग, क्लाउड स्टोरेज, सोशल मीडिया, वर्चुअल एसेट सर्विस प्रोवाइडर्स (VASPs), लेंडिंग ऐप और यहाँ तक कि गेमिंग प्लेटफॉर्म को जोड़ने वाले एकीकृत डिजिटल इकोसिस्टम हो सकते हैं।
- The FATF found that these configurations make transactions faster, more opaque and more complex, while expanding the network's reach and resilience.
FATF ने पाया कि ये स्वरूप लेन-देन को अधिक तेज, अधिक अपारदर्शी और अधिक जटिल बनाते हैं तथा साथ ही नेटवर्क की पहुँच और लचीलेपन का विस्तार करते हैं।



- The report said that digitisation is acting as a catalyst for traditional settlement mechanisms rather than replacing them, with cash remaining critical at the collection and exit points. रिपोर्ट में कहा गया है कि डिजिटलीकरण पारंपरिक निपटान तंत्रों को प्रतिस्थापित करने के बजाय उनके लिए उत्प्रेरक का कार्य कर रहा है, जबकि धन के संग्रह और निकासी के बिंदुओं पर नकदी अभी भी महत्वपूर्ण बनी हुई है।

Türkiye case study तुर्किये का केस स्टडी

- It cited a case study of Türkiye's discovery of a "digital hawala" network financing the terror group, the Islamic State of Iraq and the Levant (ISIL). इसमें तुर्किये द्वारा आतंकवादी संगठन, इस्लामिक स्टेट ऑफ इराक एंड द लेवांत (ISIL), को वित्तपोषित करने वाले एक "डिजिटल हवाला" नेटवर्क का पता लगाने के मामले का उल्लेख किया गया है।
- In 2023, raids on a self-described ISIL "administrative officer" led to the seizure of about \$57,250 in cash, followed by a further \$5,54,000, along with "hawala" notebooks and digital transfer receipts. 2023 में स्वयं को ISIL का "प्रशासनिक अधिकारी" बताने वाले एक व्यक्ति के ठिकानों पर छापेमारी के दौरान लगभग 57,250 डॉलर की नकदी जब्त की गई और बाद में 5,54,000 डॉलर की अतिरिक्त राशि, "हवाला" नोटबुक तथा डिजिटल हस्तांतरण की रसीदें भी बरामद की गई।
- A jeweller and two mobile phone shops operated as fronts, and the transfers were disguised as charity donations. एक जौहरी और मोबाइल फोन की दो दुकानों का इस्तेमाल मुखौटा प्रतिष्ठानों के रूप में किया जा रहा था और धन हस्तांतरण को धर्माApproval was also accorded for the installation of the Defence Forces Secure Access Card (DEFSAC) system, which will replace existing paper-based identity cards, passes and permits with interoperable radio frequency identification (RFID) ... रक्षा बलों के लिए Secure Access Card (DEFSAC) प्रणाली की स्थापना को भी मंजूरी दी गई, जो मौजूदा कागज-आधारित पहचान पत्रों, पास और परमिटों का स्थान इंटरऑपरेबल रेडियो फ्रीक्वेंसी आइडेंटिफिकेशन

(RFID)
प्रणाली
से
लेगी।

Are nicotine pouches beyond the law?

Does COTPA cover nicotine pouches? Why are they not covered by the law banning vapes? Could nicotine pouches be treated as food under Indian law? Can they be legally imported into India? Can nicotine pouches be sold at duty-free shops?

EXPLAINER

Murali Neelakantan

The story so far:
A new study led by the ICMR-National Institute of Cancer Prevention and Research has found that nicotine pouches are reaching Indian cities through online platforms, hookah shops and gig delivery services. The study comes after a warning from the World Health Organization in May 2026 about the dangers these products pose. Yet it is far from settled which Indian law, if any, governs them.

What are nicotine pouches?
A nicotine pouch is a small, tobacco-free, tea-bag-like sack containing nicotine, flavourings and plant-based fibres. Users place the pouch between the lip and gum for up to an hour, allowing nicotine to be absorbed directly into the bloodstream without smoke, vapour or spitting.

Does COTPA cover nicotine pouches?
The Cigarettes and Other Tobacco Products Act, 2003 (COTPA) governs the marketing, advertising and sale of cigarettes and other tobacco products. But its definition of tobacco products does not extend to all products containing nicotine. Had the legislature intended to cover every extract of the tobacco plant, it could have said so. Restrictions on the freedom of trade and commerce must be strictly construed and since nicotine pouches are not among the products listed in the Cigarettes Act, they fall outside it.

Are they regulated by the Drugs Act?
Nicotine is not listed as a drug in any schedule of the Drugs and Cosmetics Act, 1940. Nicotine patches and gums have, however, been approved as drugs by the Drug Controller General of India for therapeutic use in treating nicotine addiction. Schedule K under the Drugs and Cosmetics Rules, 1945 lists gums and lozenges and exempts them from licensing and prescription requirements if they contain less than 2 mg of nicotine. If nicotine were not considered a drug



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at all, there would be no reason to exempt certain nicotine products in Schedule K. The very fact that only some nicotine products are exempted suggests that all others are meant to be regulated by the Drugs Act.

Against this, pouches are arguably unlike patches and gums. They make no therapeutic claim and do not purport to treat addiction; they are a substitute for cigarettes. On this reading, they do not qualify as drugs under the Drugs Act.

Why are they not covered by the law banning vapes?

The import and sale of vapes is banned by the Prohibition of Electronic Cigarettes Act, 2019 ("PECA"). If vapes were drugs, no separate legislation would have been needed: the government could have regulated them, or refused licences, under the Drugs Act. The enactment of PECA therefore suggests that the Drugs Act did not give it adequate power to ban them. Nicotine pouches are different from vapes: they contain no electronic device and produce neither smoke nor vapour. They are consequently not covered by PECA.

Could pouches be treated as food?

The Prevention of Food Adulteration Act and the Food Safety and Standards Act define food broadly: any processed, partially processed or unprocessed substance intended for human consumption. Court rulings on supari and chewing tobacco establish that the

definition has a very wide amplitude, encompassing items that are chewed rather than swallowed. It is arguable, then, that nicotine pouches could fall within the broad definition of food.

Can pouches be imported into India?

Import restrictions flow from two statutes: the Foreign Trade (Development and Regulation) Act, 1992 and the Customs Act, 1962. The Foreign Trade Act empowers the Central government to prohibit, restrict or regulate imports; the Directorate General of Foreign Trade (DGFT) administers this and publishes the ITC-HS classification listing which goods are free, restricted or banned. Section 11 of the Customs Act allows the government to prohibit goods wholly or partly by notification, on grounds that include the protection of human, animal or plant life.

After the World Customs Organization updated the Harmonized System, a sub-category was introduced for oral nicotine products that do not involve combustion: 2404 91 30 covers tobacco-free single-use pouches of the Zyn or Lyft type, and 2404 91 90 covers other oral nicotine products not meant for therapeutic uses. These replaced a residual category for other manufactured tobacco substitutes; the codes for medicaments apply only where a product is strictly a cessation aid. Under the DGFT schedule and the rules of the Central Board of Indirect Taxes and Customs, goods under 2404 91 30 are "restricted".

Unlike "free" items, they cannot be cleared merely on payment of duty, and unlike "prohibited" e-cigarettes, they are not banned outright – but they require a specific licence or permission. In deciding, the DGFT cross-references the health and other ministries.

What about duty-free shops?

Nicotine pouches are currently available at a few duty-free stores at Indian airports. Such stores are licensed under Section 58 of the Customs Act and cannot claim to be entirely outside Indian law.

It is sometimes said that a duty-free shop lies outside the territory of India, and that it is the passenger who imports the goods on crossing customs control. In *Fleming Duty Free Shop Pvt. Ltd. v. Shri Kaushik Bhattacharya* (2024), the Calcutta High Court held that a duty-free store did not "import" goods into India, being deemed to be located outside it for the purposes of the Customs Act, and that legal metrology labelling requirements therefore did not apply. This should not be read to mean no Indian law applies to duty-free shops. If no Indian law applied to stores, could they stock arms and ammunition? If a crime was committed in a duty free store, which court would have jurisdiction to try the case? Which police station would have jurisdiction to register a case? That would be just too absurd.

Cigarettes, alcohol, jewellery, watches, food and small electronic items are some of the goods permitted at duty-free shops. Nicotine pouches are not – unless one can argue they are food. Given their customs classification as restricted, it is unlikely that any import licence has been granted.

What is the legal position?

The legal position is intricate, but the remedy is not. A notification under the Customs Act and the Foreign Trade Act banning the import and sale of nicotine pouches on health grounds would take minutes to issue. If the government moves as slowly as it did with vapes, pouches will become fashionable, and demand will settle in. A ban notified after that point will only produce smuggling on the scale we now see with vapes and cause damage to health that will be hard to mitigate. (Murali Neelakantan is a lawyer)

THE GIST

Nicotine pouches are not covered by COTPA or PECA, while their status under the Drugs Act is debatable. They could also arguably fall within the broad definition of food

Tobacco-free, single-use nicotine pouches require a specific licence or permission under the DGFT's ITC-HS classification; they are not prohibited outright like e-cigarettes

The government can prohibit their import and sale on health grounds. Delaying action could lead to established demand and smuggling, as seen with vapes

08S9 . Are nicotine pouches beyond the law? क्या नيكोटीन टीन

पाउच कानून के दायरे से बाहर हैं?

- A new study led by the **ICMR-National Institute of Cancer Prevention and Research** has found that nicotine pouches are reaching Indian cities through online platforms, hookah shops and gig delivery services.
ICMR-National Institute of Cancer Prevention and Research के नेतृत्व में किए गए एक नए अध्ययन में पाया गया है कि निकोटीन पाउच ऑनलाइन प्लेटफॉर्म, हुक्का दुकानों और गिग डिलीवरी सेवाओं के माध्यम से भारतीय शहरों तक पहुँच रहे हैं।

What are nicotine pouches?

निकोटीन पाउच क्या हैं?

- A nicotine pouch is a small, tobacco-free, tea-bag-like sack containing nicotine, flavourings and plant-based fibres.
निकोटीन पाउच एक छोटी, तंबाकू-मुक्त, चाय की थैली जैसी पुड़िया होती है, जिसमें निकोटीन, फ्लेवरिंग और पौधों से प्राप्त फाइबर होते हैं।
- Users place the pouch between the lip and gum for up to an hour, allowing nicotine to be absorbed directly into the bloodstream without smoke, vapour or spitting.
उपयोगकर्ता इस पाउच को एक घंटे तक होंठ और मसूड़े के बीच रखते हैं, जिससे धुँएँ, वाष्प या थूक के बिना निकोटीन सीधे रक्तप्रवाह में अवशोषित हो जाता है।

Does COTPA cover nicotine pouches?

क्या COTPA निकोटीन पाउच को कवर करता है?

- The **Cigarettes and Other Tobacco Products Act, 2003 (COTPA)** governs the marketing, advertising and sale of cigarettes and other tobacco products.
Cigarettes and Other Tobacco Products Act, 2003 (COTPA) सिगरेट और अन्य तंबाकू उत्पादों के विपणन, विज्ञापन और बिक्री को नियंत्रित करता है।
- But its definition of tobacco products does not extend to all products containing nicotine.
लेकिन तंबाकू उत्पादों की इसकी परिभाषा निकोटीन युक्त सभी उत्पादों तक विस्तारित नहीं होती है।
- Had the legislature intended to cover every extract of the tobacco plant, it could have said so.
यदि विधायिका का उद्देश्य तंबाकू के पौधे से प्राप्त प्रत्येक अर्क को इसके दायरे में लाना होता, तो वह ऐसा स्पष्ट रूप से कह सकती थी।
- Restrictions on the freedom of trade and commerce must be strictly construed and since nicotine pouches are not among the products listed in the Cigarettes Act, they fall outside it.
व्यापार और वाणिज्य की स्वतंत्रता पर लगाए गए प्रतिबंधों की सख्ती से व्याख्या की जानी चाहिए और चूँकि निकोटीन पाउच Cigarettes Act में सूचीबद्ध उत्पादों में शामिल नहीं हैं, इसलिए वे इसके दायरे से बाहर हैं।

Are they regulated by the Drugs Act?

क्या वे Drugs Act के तहत विनियमित होते हैं?

- Nicotine is not listed as a drug in any schedule of the **Drugs and Cosmetics Act, 1940**.
Drugs and Cosmetics Act, 1940 की किसी भी अनुसूची में निकोटीन को दवा के रूप में सूचीबद्ध नहीं किया गया है।
- Nicotine patches and gums have, however, been approved as drugs by the Drug Controller General of India for therapeutic use in treating nicotine addiction.
हालाँकि, निकोटीन पैच और गम को निकोटीन की लत के उपचार में चिकित्सीय उपयोग के लिए Drug Controller General of India द्वारा दवाओं के रूप में अनुमोदित किया गया है।

- Schedule K under the Drugs and Cosmetics Rules, 1945 lists gums and lozenges and exempts them from licensing and prescription requirements if they contain less than 2 mg of nicotine.

Drugs and Cosmetics Rules, 1945 की Schedule K में गम और लॉजेंज को सूचीबद्ध किया गया है तथा यदि उनमें 2 mg से कम निकोटीन हो तो उन्हें लाइसेंस और प्रिस्क्रिप्शन संबंधी आवश्यकताओं से छूट दी गई है।

Why are they not covered by the law banning vapes?

वे वेप्स पर प्रतिबंध लगाने वाले कानून के दायरे में क्यों नहीं आते?

- The import and sale of vapes is banned by the Prohibition of Electronic Cigarettes Act, 2019 ("PECA").
Prohibition of Electronic Cigarettes Act, 2019 ("PECA") के तहत वेप्स के आयात और बिक्री पर प्रतिबंध है।
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WCO, WTO and UNCTAD

All three institutions are connected with **international trade**, but they perform fundamentally different functions.

The easiest starting point is:

WTO makes/administers the rules of global trade → WCO facilitates and standardises customs operations → UNCTAD examines how trade can promote development.

1. World Customs Organization (WCO)

What is WCO?

The **World Customs Organization (WCO)** is an **independent intergovernmental organization** concerned primarily with **customs administration and the movement of goods across international borders**.

- Established:** 1952 as the Customs Co-operation Council (CCC)
- Began functioning:** 1953
- Working name "WCO":** adopted in 1994
- Headquarters:** Brussels, Belgium
- UN status:** ☐ Not part of the UN
- Members:** More than 180 customs administrations

Why is WCO necessary?

Suppose India imports a shipment containing **nicotine pouches** from another country.

Before determining tax or restrictions, Indian Customs must answer:



“What exactly is this product?”

If every country classified the same product differently, international trade would become extremely complicated.

Therefore, the WCO administers the **Harmonized Commodity Description and Coding System (HS)**.

Harmonized System (HS)

The HS gives internationally traded products standardized numerical classifications.

For example, your source discusses the international classification under which oral nicotine products are differentiated, including tobacco-free single-use nicotine pouches.

Countries can extend the international HS classification for national purposes. India uses the **ITC-HS (Indian Trade Classification based on Harmonized System)**.

Other important WCO functions

WCO works on:

- Customs modernisation
- Trade facilitation
- Prevention of customs fraud and smuggling
- Supply-chain security
- Customs valuation and origin issues
- Capacity building of customs administrations
- International cooperation among customs authorities

An important WCO instrument is the **Revised Kyoto Convention**, aimed at simplification and harmonisation of customs procedures.

Layperson example

A container arrives at Mumbai port.

WCO/HS framework helps Customs determine:

“What category of goods is inside this container?”

Indian law then determines the **duty, licence requirements and import restrictions** applicable to those goods.

2. World Trade Organization (WTO)

What is WTO?

The **World Trade Organization** is the principal international organization dealing with



rules governing trade between countries.

- Established: 1 January 1995
- Predecessor: GATT, 1947
- Headquarters: Geneva, Switzerland
- UN status: ☐ Not a UN specialized agency
- Membership: 166 members

What does WTO do?

Its central objective is to provide a **rules-based framework for international trade**.

Suppose India increases tariffs on a particular imported product.

Another WTO member might argue:

“India committed under WTO rules not to raise this tariff beyond a particular level.”

That becomes a **WTO trade-law issue**, not primarily a WCO issue.

Major WTO agreements

Three are particularly important for UPSC:

GATT → Trade in **goods**

GATS → Trade in **services**

TRIPS → **Intellectual property rights**

Other agreements cover agriculture, subsidies, sanitary and phytosanitary measures, technical barriers to trade, trade facilitation and several other areas.

Major functions

The WTO:

1. Administers multilateral trade agreements
2. Provides a forum for trade negotiations
3. Handles trade disputes through its dispute-settlement framework
4. Reviews members' trade policies
5. Cooperates with other international institutions

Most Favoured Nation (MFN)

A fundamental WTO principle is **non-discrimination**.

In simplified terms, if a WTO member gives a particular trade advantage to one member, it normally should extend equivalent treatment to other WTO members, subject to important exceptions such as **free-trade agreements**.

National Treatment

Once imported goods have entered the domestic market, they should generally not receive **less favourable treatment than comparable domestic products** merely because they are foreign.

So remember:

MFN = discrimination between foreign trading partners

National Treatment = discrimination between imported and domestic products after entry into the market

3. UNCTAD — UN Trade and Development

What is UNCTAD?

UNCTAD was established in 1964 as the **United Nations Conference on Trade and Development**.

Since 2024, it has used “**UN Trade and Development**” as its institutional name while retaining the familiar acronym UNCTAD.

- **Established: 1964**
- **Headquarters: Geneva, Switzerland**
- **Members: 195**
- **UN status:** ☐ **Part of the United Nations system**
- More precisely, it is a **permanent intergovernmental body established by the UN General Assembly**, rather than a UN specialized agency.

Why was UNCTAD created?

Many newly independent developing countries faced an economic problem.

Imagine Country A exports:

Raw cocoa → \$1

A developed country processes it into:

Chocolate → \$5 or \$10

The developing country participates in international trade but captures relatively little of the

value addition.

Thus:

More trade does not necessarily mean more development.

UNCTAD emerged partly from demands that the international economic system pay greater attention to the problems of **developing countries**.

What does UNCTAD do?

Its work broadly covers:

Trade — helping developing countries integrate beneficially into global trade.

Investment — analysing international investment and **FDI**.

Finance and debt — examining debt sustainability and international financial vulnerabilities.

Commodities — studying economies dependent on commodities such as oil, coffee, cocoa and minerals.

Technology and digital economy — analysing digitalisation and its development consequences.

Technical assistance — helping developing countries improve their trade and development policies.

Important publication

One of the most important for UPSC is:

World Investment Report → UNCTAD

It is an important source for information about **global FDI flows and multinational enterprises**.

Now Compare WCO, WTO and UNCTAD

Imagine an Indian company wants to **import a product from Germany**.

Question 1: What exactly is this product for customs purposes?

➡ ☐ **WCO**

The **HS classification system** helps classify it internationally.

Question 2: Is India's trade policy toward Germany consistent with its international trade commitments?

➡ ☐ WTO

WTO agreements provide the applicable international trade rules.

Question 3: Is this trade helping India achieve development, investment and structural transformation?

➡ ☐ UNCTAD

UNCTAD studies the relationship between **trade, investment and development**.

Final Comparative Table

Feature	WCO	WTO	UNCTAD
Full name	World Customs Organization	World Trade Organization	UN Trade and Development
Established	1952	1995	1964
Predecessor/original name	Customs Co-operation Council	GATT framework preceded WTO	UN Conference on Trade and Development
Headquarters	Brussels	Geneva	Geneva
Part of UN?	☐ No	☐ No	☐ Yes
UN specialized agency?	☐ No	☐ No	☐ No
Main concern	Customs	Trade rules	Trade & development
Key instrument/system	HS classification	WTO Agreements	Research, policy dialogue & technical assistance
Major focus	Movement/classification of goods across borders	Rules governing international trade	Developing economies
Dispute settlement	Not WTO-like	Yes	No WTO-like mechanism
Binding trade rules	Not its central role	Yes	Generally no
Key UPSC association	HS Codes	GATT, GATS, TRIPS	World Investment Report

PCS Special:

08S9 Malayalam filmmaker Sarath is no more

08 September

	मलयालम फिल्मकार शरथ नहीं रहे
08S9	Central institute develops app to measure fish size hands-free केंद्रीय संस्थान ने मछलियों के आकार को बिना हाथ लगाए मापने वाला ऐप विकसित किया
08S9	Four-time Keralam MLA and cooperative activist passes away केरल के चार बार विधायक रहे सहकारी क्षेत्र के कार्यकर्ता का निधन
08S9	India's carbon credit scheme receives U.K. recognition: official भारत की कार्बन क्रेडिट योजना को ब्रिटेन की मान्यता: अधिकारी
08S9	Gujarat to host National Film Awards for first time गुजरात पहली बार राष्ट्रीय फिल्म पुरस्कार समारोह की मेजबानी करेगा
08S9	New script unfolds as Kashmir hosts its inaugural international film festival नई पटकथा का आगाज़, कश्मीर ने अपने पहले अंतरराष्ट्रीय फिल्म महोत्सव की मेज़बानी की
08S9	LPG booking interval in rural areas cut to 25 days ग्रामीण क्षेत्रों में LPG बुकिंग का अंतराल घटाकर 25 दिन किया गया

Malayalam filmmaker Sarath is no more

PCS
The Hindu Bureau
THIRUVANANTHAPURAM

Filmmaker R. Sarath, known for his contemplative cinema that expressed environmental concerns, passed away at a hospital in Thiruvananthapuram on Monday. He was 65.

Two years after India conducted nuclear tests at Pokhran, Sarath made *Sayahnam* (2000), his debut film that raised questions on the issue. It portrayed the story through the eyes of an ageing writer who is upset about the nuclear tests and his scientist son who celebrates the achievement. The film fetched him the Indira Gandhi Award for Best Debut Film of a Director, the National Film Award for Best Feature Film in Malayalam, and seven Kerala State Film Awards.

He followed it up with *Sthithi* (2003), a film that centres on the life of a couple employed in the government Secretariat, and *Seelabathi* (2005), a drama set in rural Keralam that revolves around the experiences of two young people who come from outside the village, which foregrounded how human greed destroyed nature.

He began his career as a journalist and later took to documentary filmmaking.

08S9. Malayalam filmmaker Sarath is no more मलयालम फिल्मकार शरथ नहीं रहे

- Filmmaker R. Sarath, known for his contemplative cinema that expressed environmental concerns, passed away at a hospital in Thiruvananthapuram on Monday. पर्यावरण संबंधी चिंताओं को अभिव्यक्त करने वाली अपनी चिंतनशील फिल्मों के लिए जाने जाने वाले फिल्मकार आर. शरथ का सोमवार को तिरुवनंतपुरम के एक अस्पताल में निधन हो गया।

- Two years after India conducted nuclear tests at Pokhran, Sarath made *Sayahnam* (2000), his debut film that raised questions on the issue. भारत द्वारा पोखरण में परमाणु परीक्षण किए जाने के दो वर्ष बाद, शरथ ने अपनी पहली फिल्म *Sayahnam* (2000) बनाई, जिसमें इस मुद्दे पर सवाल उठाए गए थे।

- It portrayed the story through the eyes of an ageing writer who is upset about the nuclear tests and his scientist son who celebrates the achievement. इस फिल्म में कहानी एक वृद्ध लेखक की दृष्टि से प्रस्तुत की गई थी, जो परमाणु परीक्षाओं से व्यथित है, जबकि उसका वैज्ञानिक पुत्र इस उपलब्धि का जश्न मनाता है।

- The film fetched him the Indira Gandhi Award for Best Debut Film of a Director, the National Film Award for Best Feature Film in Malayalam, and seven Kerala State Film Awards.

इस फिल्म के लिए उन्हें निर्देशक की सर्वश्रेष्ठ पहली फिल्म का इंदिरा गांधी पुरस्कार, मलयालम में सर्वश्रेष्ठ फीचर फिल्म का राष्ट्रीय फिल्म पुरस्कार और सात केरल राज्य फिल्म पुरस्कार प्राप्त हुए।

Central institute develops app to measure fish size hands-free

PCS
The Hindu Bureau
KOCHI

The Central Marine Fisheries Research Institute (CMFRI), headquartered in Kochi, Keralam, has claimed to have developed a smartphone application that can measure the length and width of fish without physically handling them.

Named MatsyaMetri, the application, which has been designed for fisheries scientists, researchers, and field survey teams, facilitates rapid and systematic collection of biological data to support fisheries assessment and management.

The application was developed by Eldho Varghese,



Representative photo.

ese, a senior scientist at the institute, according to a CMFRI release.

Grinson George, Director of the institute, said the application simplified biological data collection by automatically recording measurements and generating length-frequency datasets. The application allows multiple individuals

The application simplifies biological data collection by recording fish measurements

of the same fish species or aquatic resource to be measured under a single sampling session. Once measurements are completed, the system automatically generates length-frequency distributions using appropriate class intervals.

The recorded measurements and the corresponding photographs can be saved along with the sampling session and subsequently exported as a CSV file for further analysis.

08S9. Central institute develops app to measure fish size hands-free

केंद्रीय संस्थान ने मछलियों के आकार को बिना हाथ लगाए मापने वाला ऐप विकसित किया

- The Central Marine Fisheries Research Institute (CMFRI), headquartered in Kochi, Keralam, has claimed to have developed a smartphone application that can measure the length and width of fish without physically handling them.

कोच्चि, केरल में मुख्यालय वाले केंद्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान (CMFRI) ने दावा किया है कि उसने एक ऐसा स्मार्टफोन एप्लिकेशन विकसित किया है, जो मछलियों को शारीरिक रूप से छुए बिना उनकी लंबाई और चौड़ाई माप सकता है।

- Named MatsyaMetri, the application, which has been designed for fisheries scientists, researchers, and field survey teams, facilitates rapid and systematic collection of biological data to support fisheries assessment and management.

MatsyaMetri नामक यह एप्लिकेशन मत्स्य विज्ञानियों, शोधकर्ताओं और क्षेत्रीय सर्वेक्षण टीमों के लिए डिजाइन किया गया है तथा मत्स्य संसाधनों के आकलन और प्रबंधन में सहायता के लिए जैविक आँकड़ों के त्वरित और व्यवस्थित संग्रह को सुगम बनाता है।

- The application was developed by Eldho Varghese, a senior scientist at the institute, according to a CMFRI release.

CMFRI की एक विज्ञप्ति के अनुसार, इस एप्लिकेशन को संस्थान के वरिष्ठ वैज्ञानिक एल्डो वर्गीज़ ने विकसित किया है।

- Grinson George, Director of the institute, said the application simplified biological data collection by automatically recording measurements and generating length-frequency datasets.

संस्थान के निदेशक ग्रिन्सन जॉर्ज ने कहा कि यह एप्लिकेशन मापों को स्वचालित रूप से दर्ज करके और लंबाई-आवृत्ति संबंधी डेटासेट तैयार करके जैविक आँकड़ों के संग्रह को सरल बनाता है।

- The application allows multiple individuals of the same fish species or aquatic resource to be measured under a single sampling session.
यह एप्लिकेशन एक ही सैंपलिंग सत्र के अंतर्गत एक ही मछली प्रजाति या जलीय संसाधन के कई नमूनों के मापन की अनुमति देता है।
- Once measurements are completed, the system automatically generates length-frequency distributions using appropriate class intervals.
मापन पूरा होने के बाद, यह प्रणाली उपयुक्त वर्ग-अंतरालों का उपयोग करके लंबाई-आवृत्ति वितरण स्वतः तैयार करती है।
- The recorded measurements and the corresponding photographs can be saved along with the sampling session and subsequently exported as a CSV file for further analysis.
दर्ज किए गए मापों और उनसे संबंधित तस्वीरों को सैंपलिंग सत्र के साथ सुरक्षित किया जा सकता है तथा बाद में आगे के विश्लेषण के लिए **CSV फाइल** के रूप में निर्यात किया जा सकता है।

India's carbon credit scheme receives U.K. recognition: official

PCS
Press Trust of India
NEW DELHI

In a major breakthrough, the U.K. has recognised India's Carbon Credit Trading Scheme (CCTS) as a qualifying criterion for pricing relief under its carbon border adjustment mechanism (CBAM), a move that would reduce the tax burden on domestic exporters, an official said on Monday.

In a communication addressed to the Bureau of Energy Efficiency, Ministry of Power, the U.K.'s His Majesty's Treasury confirmed that the CCTS has been included in the U.K.'s published indicative list of overseas carbon pricing schemes assessed as qualifying criteria under a provision of the Carbon Bor-



The recognition is expected to reduce tax burden on Indian exporters. GETTY IMAGES

der Adjustment Mechanism (Calculation of CBAM Rate and Determination of Carbon Price Relief) Regulations 2026, the official said.

"This will reduce the effective CBAM liability on Indian goods, directly benefiting Indian exporters," the official said.

08S9. India's carbon credit scheme receives U.K. recognition: official भारत की कार्बन क्रेडिट योजना को ब्रिटेन की मान्यता: अधिकारी

- In a major breakthrough, the U.K. has recognised India's Carbon Credit Trading Scheme (CCTS) as a qualifying criterion for pricing relief under its carbon border adjustment mechanism (CBAM), a move that would reduce the tax burden on domestic exporters, an official said on Monday.

एक महत्वपूर्ण उपलब्धि के रूप में, ब्रिटेन ने भारत की कार्बन क्रेडिट ट्रेडिंग स्कीम (CCTS) को अपने कार्बन बॉर्डर एडजस्टमेंट मैकेनिज्म (CBAM) के तहत मूल्य-निर्धारण में राहत के लिए एक पात्र मानदंड के रूप में मान्यता दी है। एक अधिकारी ने सोमवार को कहा कि इस कदम से घरेलू निर्यातकों पर कर का बोझ कम होगा।

- In a communication addressed to the **Bureau of Energy Efficiency, Ministry of Power**, the U.K.'s His Majesty's Treasury confirmed that the CCTS has been included in the U.K.'s published indicative list of overseas carbon pricing schemes assessed as qualifying criteria under a provision of the Carbon Border Adjustment Mechanism (Calculation of CBAM Rate and Determination of Carbon Price Relief) Regulations 2026, the official said.

ऊर्जा दक्षता ब्यूरो (BEE), विद्युत मंत्रालय को संबोधित एक पत्र में ब्रिटेन के महामहिम ट्रेजरी (His Majesty's Treasury) ने पुष्टि की कि CCTS

को ब्रिटेन द्वारा प्रकाशित विदेशी कार्बन मूल्य-निर्धारण योजनाओं की संकेतात्मक सूची में शामिल किया गया है। इन योजनाओं का आकलन 2026 के Carbon Border Adjustment Mechanism (Calculation of CBAM Rate and Determination of Carbon Price Relief) Regulations के एक प्रावधान के तहत पात्र मानदंडों के रूप में किया गया है।

- "This will reduce the effective CBAM liability on Indian goods, directly benefiting Indian exporters," the official said.

अधिकारी ने कहा, "इससे भारतीय वस्तुओं पर प्रभावी CBAM देयता कम होगी और भारतीय निर्यातकों को सीधे लाभ मिलेगा।"



Gujarat to host National Film Awards for first time

PCS
The Hindu Bureau
NEW DELHI

The National Film Awards ceremony will take place in Gujarat for the first time on September 22, with the 72nd edition scheduled in Ekta Nagar. President Droupadi Murmu will present the awards, government officials said on Monday.

The move to Ekta Nagar marks a departure from the awards' traditional venue in Delhi. The first National Film Awards ceremony was organised here in 1954, and Delhi has hosted most of the subsequent ceremonies. The Awards have been presented outside Delhi before — the 17th and 18th editions were held in Madras (now Chennai) in 1970 and 1971, as per reports.

The winners of the 72nd National Film Awards, announced in July, include Article 370 as the best feature film. Yami Gautam has been named as the best actress for the same film. Mammooty and Kartik Aaryan will share the best actor award for their performances in Bramayugam (Malayalam) and Chandu Champion (Hindi) respectively.

Randeep Hooda has won the best debut director award for Swatantrya Veer Savarkar.

08S9. Gujarat to host National Film Awards for first time गुजरात पहली बार राष्ट्रीय फिल्म पुरस्कार समारोह की मेजबानी करेगा

The National Film Awards ceremony will take place in Gujarat for the first time on September 22, with the 72nd edition scheduled in Ekta Nagar.

राष्ट्रीय फिल्म पुरस्कार समारोह पहली बार गुजरात में 22 सितंबर को आयोजित किया जाएगा और इसका 72वाँ संस्करण एकता नगर में आयोजित किया जाएगा।

President Droupadi Murmu will present the awards, government officials said on Monday.

सरकारी अधिकारियों ने सोमवार को बताया कि राष्ट्रपति द्रौपदी मुर्मू पुरस्कार प्रदान करेंगी।

The move to Ekta Nagar marks a departure from the awards' traditional venue in Delhi.

समारोह को एकता नगर में आयोजित किया जाना पुरस्कारों के पारंपरिक आयोजन स्थल दिल्ली से हटकर एक महत्वपूर्ण बदलाव है।

The first National Film Awards ceremony was organised here in 1954, and Delhi has hosted most of the subsequent ceremonies.

पहला राष्ट्रीय फिल्म पुरस्कार समारोह 1954 में यहीं आयोजित किया गया था और उसके बाद के अधिकांश समारोहों की मेजबानी दिल्ली ने की है।

The Awards have been presented outside Delhi before — the 17th and 18th editions were held in Madras (now Chennai) in 1970 and 1971, as per reports.

राष्ट्रीय फिल्म पुरस्कार पहले भी दिल्ली के बाहर प्रदान किए जा चुके हैं—रिपोर्टों के अनुसार, 17वाँ और 18वाँ संस्करण 1970 और 1971 में मद्रास (अब चेन्नई) में आयोजित किए गए थे।

The winners of the 72nd National Film Awards, announced in July, include Article 370 as the best feature film.

जुलाई में घोषित 72वें राष्ट्रीय फिल्म पुरस्कारों के विजेताओं में Article 370 को सर्वश्रेष्ठ फीचर फिल्म का पुरस्कार मिला है।

Yami Gautam has been named as the best actress for the same film.

इसी फिल्म के लिए यामी गौतम को सर्वश्रेष्ठ अभिनेत्री चुना गया है।

Mammooty and Kartik Aaryan will share the best actor award for their performances in Bramayugam (Malayalam) and Chandu Champion (Hindi) respectively.

Bramayugam (मलयालम) और Chandu Champion (हिंदी) में अपने-अपने अभिनय के लिए ममूटी और कार्तिक आर्यन संयुक्त रूप से सर्वश्रेष्ठ अभिनेता का पुरस्कार साझा करेंगे।

Randeep Hooda has won the best debut director award for Swatantrya Veer Savarkar.

Swatantrya Veer Savarkar के लिए रणदीप हुड्डा ने सर्वश्रेष्ठ नवोदित निर्देशक का पुरस्कार जीता है।

New script unfolds as Kashmir hosts its inaugural international film festival

PCS

Peerzada Ashiq
SRINAGAR

Kashmir, where all 15 cinema halls had closed down in the wake of militancy over three decades, on Monday hosted its first-ever four-day international film festival with the screening of the Lebanese film *Dead Dog*, a drama on the reunion of an estranged couple.

Under a multi-layer security cover, director Sarah Francis' movie, the first among 135 films to be screened from 41 countries, was shown at the Inox theatre in Srinagar's Shiv Pora area. The multiplex is the first functional cinema hall to reopen in the valley after 23 years in 2022.

Jammu & Kashmir Chief Minister Omar Abdullah addressed a gathering at Sher-i-Kashmir International Convention Centre (SKICC) in Srinagar and called the festival "a new



Chief Minister Omar Abdullah at the inauguration of the International Film Festival Jammu and Kashmir in Srinagar. IMRAN NISSAR

chapter in the long-standing relationship between J&K and cinema".

"To stand here today under the majestic shade of the chinar trees, surrounded by the sentinel peaks of the Himalayas, is to be reminded that some places on earth do not merely boast stories. They are born of them," said Mr. Abdullah.

He said the festival's clear message is about "Kashmir's potential as a

global filmmaking destination". "We are declaring to the world that Kashmir is not just a location on a call sheet. It is a creative sanctuary, a home for global storytellers, and a voice that is ready to speak to the world," he said.

He said the four-day festival would provide young people with opportunities to learn from filmmakers and cinema professionals from around the world. "This festival is not just a

celebration of cinema, it is a declaration of intent," he added.

'Landmark initiative'

Inaugurated by Jammu & Kashmir Chief Secretary Atal Dulloo and Directorate of Information and Public Relations director Shreya Singhal, the festival will screen movies at venues in Srinagar's SKICC and Inox, Gulmarg, and Jammu city. It is tipped to be a major "landmark cultural initiative that celebrates the universal language of cinema".

"We received around 1,100 entries for the festival. After screening, 135 entries were shortlisted, including more than 60 foreign films. This is an opportunity to reconnect J&K with the world of cinema and invite the film industry not only from the country but also from abroad, and make Kashmir once again a prominent film destination," said Mr. Dulloo.

08S9. New script unfolds as Kashmir hosts its inaugural international film festival

नई पटकथा का आगाज़, कश्मीर ने अपने पहले अंतरराष्ट्रीय फिल्म महोत्सव की मेज़बानी की

- Kashmir, where all 15 cinema halls had closed down in the wake of militancy over three decades, on Monday hosted its first-ever four-day international film festival with the screening of the Lebanese film *Dead Dog*, a drama on the reunion of an estranged couple.

कश्मीर में, जहाँ तीन दशक से अधिक समय पहले उग्रवाद के चलते सभी 15 सिनेमा हॉल बंद हो गए थे, सोमवार को पहली बार चार दिवसीय अंतरराष्ट्रीय फिल्म महोत्सव का आयोजन किया गया, जिसमें अलग हो चुके एक दंपति के पुनर्मिलन पर आधारित लेबनानी फिल्म *Dead Dog* की स्क्रीनिंग की गई।